



CITY OF BIRMINGHAM

REPORT OF THE
MEDICAL OFFICER
OF HEALTH

FOR THE YEAR

1958



CONTENTS

1. Members of the Health Committee
2. Functions of Sub-Committees of the Health Committee
3. Staff of the Public Health Department
4. Introduction by Medical Officer of Health
 Ten Years Survey of the Personal Health Service
5. Birmingham—general—climatology
6. Vital Statistics
7. General Epidemiology
8. Immunisation
9. Laboratory Services
 - (a) Analytical Laboratory
 - (b) Public Health Laboratory Service
10. Tuberculosis
11. Personal Health Services
 - (a) Maternity and Child Welfare
 - (b) Health Visiting
 - (c) Home Nursing
 - (d) Ambulance Service
 - (e) Prevention of Illness, Care and After-care
 - (f) Domestic Help
 - (g) Mental Health
 - (h) Nursing Homes
12. Medical Care of Deprived Children
13. National Assistance Acts
 - (a) Compulsory removal
 - (b) Blindness
 - (c) Cerebral Palsy
 - (d) Epilepsy
14. Cremation : Staff Welfare
15. Food and Drugs
16. Environmental Conditions
 - (a) Housing
 - (b) Public Health Inspection
 - (c) Industrial Premises
 - (d) Atmospheric Pollution Control

MEMBERS OF THE HEALTH COMMITTEE

Municipal Year, 1958-59

Chairman ALDERMAN W. T. BOWEN, J.P.

(Chairman of Staff Sub-Committee and Staff Discipline Sub-Committee).

THE LORD MAYOR (ALDERMAN D. JOHNSTONE)

ALDERMAN G. CORBYN BARROW.

(Chairman of Health Education Sub-Committee)

ALDERMAN MRS. A. LONGDEN, J.P.

(Chairman of Finance and General Purposes Sub-Committee).

COUNCILLOR E. L. BENNETT.

COUNCILLOR MRS. A. BILLINGTON, J.P.

COUNCILLOR MRS. M. A. BROWN.

(Chairman of Maternity and Child Welfare Sub-Committee).

COUNCILLOR MRS. F. M. COCKS.

COUNCILLOR MRS. J. COLE.

COUNCILLOR MRS. M. A. M. COOKE.

COUNCILLOR H. FINCH.

COUNCILLOR F. F. GRIFFIN.

COUNCILLOR MRS. F. E. HAMMOND.

COUNCILLOR C. HUXTABLE.

COUNCILLOR W. A. N. JONES.

COUNCILLOR MRS. H. L. RADFORD.

(Chairman of Mental Health Sub-Committee).

COUNCILLOR W. F. SMITH.

COUNCILLOR W. J. H. SOWTON.

COUNCILLOR A. T. WALKER.

COUNCILLOR J. T. WEBSTER.

COUNCILLOR N. WHITEHOUSE.

COUNCILLOR MISS O. M. WILLIAMS.

COUNCILLOR MRS. A. F. WOOD, C.B.E., J.P.

SUB-COMMITTEES OF THE HEALTH COMMITTEE

Finance and General Purposes Sub-Committee

Chairman—ALDERMAN MRS. A. LONGDEN.

ALDERMEN G. CORBYN BARROW, W. T. BOWEN.

COUNCILLORS E. L. BENNETT, MRS. M. A. BROWN, MRS. F. M. COCKS, MRS. J. COLE, MRS. M. A. M. COOKE, F. F. GRIFFIN, MRS. F. E. HAMMOND, MRS. H. L. RADFORD, W. F. SMITH, A. T. WALKER, J. T. WEBSTER, MISS O. M. WILLIAMS, MRS. A. F. WOOD.

RESPONSIBILITIES :

Public Health Acts ; Clean Air Act ; Prevention of Damage by Pests Act ; Milk and Dairies legislation ; Food and Drugs Acts ; Housing Acts (part) ; National Health Service Act (Section 21, Health Centres ; Section 26, Vaccination and Immunisation ; Section 27, Ambulance Service ; Section 28, Prevention of Illness, Care and After-Care) ; Rag Flock and other Filling Materials Act ; Rent Act ; Heating Appliances (Fireguards) Act and other miscellaneous enactments not within the scope of personal services.

Maternity and Child Welfare Sub-Committee

Chairman—COUNCILLOR MRS. M. A. BROWN.

ALDERMEN G. CORBYN BARROW, W. T. BOWEN.

COUNCILLORS MRS. F. M. COCKS, MRS. J. COLE, MRS. M. A. M. COOKE, H. FINCH, F. F. GRIFFIN, C. HUXTABLE, W. A. N. JONES, MRS. H. L. RADFORD, W. F. SMITH, W. J. H. SOWTON, A. T. WALKER, N. WHITEHOUSE.

RESPONSIBILITIES :

The Public Health Act in so far as it relates to the inspection of Nursing Homes ; The National Health Service Act [Section 22, Care of Mothers and Young Children ; Section 23, Midwifery ; Section 24, Health Visiting ; Section 25, Home Nursing ; Section 28, Prevention of Illness, Care and After-Care (Care of the Aged) ; Section 29, Domestic Help] and all matters relating to Maternity and Child Welfare contained in other enactments.

Mental Health Sub-Committee

Chairman—COUNCILLOR MRS. H. L. RADFORD.

ALDERMEN G. CORBYN BARROW, W. T. BOWEN.

COUNCILLORS E. L. BENNETT, MRS. A. BILLINGTON, MRS. J. COLE, MRS. M. A. M. COOKE, MRS. F. E. HAMMOND, C. HUXTABLE, W. A. N. JONES, W. J. H. SOWTON, N. WHITEHOUSE, MRS. A. F. WOOD.

RESPONSIBILITIES :

The National Health Service Act, Section 28 (Prevention of Illness, Care and After-Care related to Mental Health) and Section 51.

The above Committees meet monthly.

**Health Education Sub-Committee*

Chairman—ALDERMAN G. CORBYN BARROW.

ALDERMAN W. T. BOWEN.

COUNCILLORS E. L. BENNETT, MRS. A. BILLINGTON, MRS. M. A. BROWN, MRS. F. M. COCKS, MRS. J. COLE, H. FINCH, MRS. H. L. RADFORD, W. F. SMITH, N. WHITEHOUSE, MISS O. M. WILLIAMS, MRS. A. F. WOOD.

RESPONSIBILITIES :

The National Health Service Act, Section 28 (Prevention of Illness, Care and After-Care, as related to Health Education).

*Staff Sub-Committee

Chairman—ALDERMAN W. T. BOWEN.

ALDERMAN MRS. A. LONGDEN.

COUNCILLORS MRS. M. A. BROWN, W. F. SMITH.

*Staff Discipline Sub-Committee

Chairman—ALDERMAN W. T. BOWEN.

ALDERMEN G. CORBYN BARROW, MRS. A. LONGDEN.

COUNCILLORS MRS. M. A. BROWN, MRS. H. L. RADFORD, W. F. SMITH.

*These Committees meet at the call of the Chairmen.

OTHER COMMITTEES OF THE CITY COUNCIL CONCERNED WITH MATTERS OF PUBLIC HEALTH AND THE SOCIAL SERVICES

Baths Committee (provision of bathing establishments).

Children's Committee (care of deprived children and adoption).

Finance Committee and also the General Purposes Committee (financial provisions of the various enactments).

Fire Brigade Committee (Ambulance Service on an agency basis).

House Building Committee (erection of houses).

Housing Management Committee (slum clearance and management of municipal houses).

Markets and Fairs Committee (regulation, control and management of markets and fairs and also the supervision of food factories and food shops other than premises where food is prepared for consumption on the premises).

Public Works Committee (*inter alia* in charge of all works in connection with public drains and sewers, paving surfacing and maintenance of streets and roads, the lighting and cleansing of highways, etc.).

Salvage Committee (refuse disposal).

Water Committee (provision of the City's water supply).

Welfare Committee (provision of services under the National Assistance Acts, 1948 and 1951).

STAFF OF THE PUBLIC HEALTH DEPARTMENT AS AT 31st DECEMBER, 1958

Medical Officer of Health :

MATTHEW BURN, M.C., M.M., F.R.C.P. (Edin.), D.P.H., D.T.M. & H.

Deputy Medical Officer of Health :

E. L. M. MILLAR, M.Sc., M.D., Ch.B., D.P.H.

Secretary-Accountant :

C. C. BATEMAN, A.C.A., F.C.C.S.

Administrative Medical Officers of Health :

W. R. MARTINE, O.B.E., T.D., M.D., Ch.B., D.P.H.

W. NICOL, M.B., Ch.B., D.P.H.

A. J. ESSEX-CATER, M.R.C.S., L.R.C.P., D.C.H., D.P.H., D.I.H.

Deputy to Administrative Medical Officer of Health for Maternity and Child Welfare:

BESSIE HATHERLEY, M.B., Ch.B., M.M.S.A.

Medical Superintendent for Nurseries and Deprived Children :

MARGARET C. O'BRIEN, M.B., Ch.B., D.P.H., M.M.S.A.

Assistant Administrative Medical Officers of Health :

D. F. MAHON, M.B., B.Ch., B.A.O., D.P.H., B.Sc.(Public Health), L.M.

MARY M. M. BOYD, M.Sc., M.B., Ch.B., M.R.C.P. (Edin.), D.R.C.O.G., D.C.H., D.P.H.

Medical Officer in Charge of Immunisation :

H. W. S. FRANCIS, M.A., M.B., B.Chir. (Cantab.), D.P.H.

Assistant Administrative Medical Officer of Health for Diphtheria Immunisation :

VERA FELLOWES, M.B., Ch.B.

Medical Officer for B.C.G. Vaccination :

W. L. GORDON, B.M., B.Ch. (Oxon.).

Medical Officer for Staff Welfare :

J. J. LANDON, M.A., M.B., B.Chir. (Cantab.), M.R.C.S. (Eng.), L.R.C.P. (Lond.)

Senior Dental Officer :

F. J. HASTILOW, L.D.S.

City Analyst :

H. H. BAGNALL, B.Sc., F.R.I.C.

Chief Public Health Inspector :

E. N. WAKELIN, F.R.S.H., M.A.P.H.I.

Chief Housing Inspector :

D. J. E. LAMB, M.C., T.D., F.A.P.H.I.

Chief Smoke Inspector :

G. W. FARQUHARSON, M.A.P.H.I.

SECRETARIAL AND ACCOUNTANCY

Secretary-Accountant	...	...	...	...	...	...	...	...	1
Assistant Secretary	...	...	...	...	...	...	...	...	1
Administrative Assistant	...	...	...	...	...	...	...	...	1
Deputy Accountant	...	...	...	...	...	...	...	...	1
Assistant Accountant	...	...	...	...	...	...	...	...	1
Staff Officer	...	...	...	...	...	...	...	...	1
Steward	...	...	...	...	...	...	...	...	1
Steward for Home Nursing Service	...	...	...	...	...	...	...	...	1
Administrative, Accountancy and Clerical Staff...	...	...	...	...	...	...	...	...	88

MATERNITY AND CHILD WELFARE

Administrative Medical Officer of Health	...	...	...	...	...	...	...	...	1
Deputy Administrative Medical Officer of Health	...	...	...	...	...	...	...	...	1
Medical Officer for Nurseries and Deprived Children	...	...	...	...	...	...	...	...	1
Assistant Administrative Medical Officers of Health (in conjunction with other duties)	...	...	...	...	...	...	...	...	2
Assistant Medical Officers for Maternity and Child Welfare (Clinical Medical Officers)	...	...	...	...	...	...	...	...	17
Senior Dental Officer	...	...	...	...	...	...	...	...	1
Assistant Dental Officers (Part-time)	...	...	...	...	...	...	...	...	16

Health Visitors

Superintendent	...	...	...	...	...	...	...	...	1
Deputy Superintendent	...	...	...	...	...	...	...	...	1
Health Visitor Tutors	...	...	...	...	...	...	...	...	2
Health Visitors and other professional Staff	...	...	...	...	...	...	...	...	161

Midwives

Supervisors	...	...	...	...	...	...	...	...	3
Midwives	...	...	...	...	...	...	...	...	113

Health Education

Organiser	...	...	...	...	...	...	...	...	1
Assistant Lecturer and Artists	...	...	...	...	...	...	...	...	3

Day Nurseries

Senior Supervisor of Day Nurseries	...	...	...	...	...	...	...	...	1
Supervisor of Day Nurseries	...	...	...	...	...	...	...	...	1
Nursery Nurses and other professional Staff	...	...	...	...	...	...	...	...	272

Home Nursing Service

Superintendent of Home Nursing Service	...	...	...	...	...	...	...	...	1
Deputy Superintendent of Home Nursing Service	...	...	...	...	...	...	...	...	Vacant
Home Nursing Tutor	...	...	...	...	...	...	...	...	1
Nursing Staff	...	...	...	...	...	...	...	...	190

Domestic Help

Organiser	...	...	...	...	...	...	...	...	1
Assistant Organiser	...	...	...	...	...	...	...	...	1
District Organisers	...	...	...	...	...	...	...	...	8
Domestic Helps (Full-time)	...	...	...	...	...	...	...	...	68
Domestic Helps (Part-time)	...	...	...	...	...	...	...	...	802
Night watchers	...	...	...	...	...	...	...	...	23

John Foster Vince Memorial Home (Mother and Baby Home)

Matron	...	...	...	...	...	...	...	...	...	1
Nursing Staff	...	...	...	...	...	...	...	...	...	2
Domestic Staff	...	...	...	...	...	...	...	...	...	3
<i>Clerical Staff</i>	...	...	...	...	...	...	...	...	...	27
<i>Miscellaneous Staff</i>										
Non-manual (Full and part-time)	...	...	...	...	...	...	...	...	...	89
Manual	...	...	...	...	...	...	...	...	...	199

MENTAL HEALTH

Administrative Medical Officer of Health for Mental Health	...	...	...	...	...	...	...	...	...	1
<i>Mental Deficiency</i>										
Chief Inspector	...	...	...	...	...	...	...	...	...	1
Senior Inspector and Petitioning Officer	...	...	...	...	...	...	...	...	...	1
Inspectors	...	...	...	...	...	...	...	...	...	3
Clerical Staff	...	...	...	...	...	...	...	...	...	5
<i>Psychiatric Social Service</i>										
Senior Psychiatric Social Worker	...	...	...	...	...	...	...	...	...	1
Psychiatric Social Worker (Parent Guidance Clinic)	...	...	...	...	...	...	...	...	...	1
Social Workers	...	...	...	...	...	...	...	...	...	8
Clerical Staff	...	...	...	...	...	...	...	...	...	3
<i>Lunacy and Mental Treatment</i>										
Chief Authorised Officer	...	...	...	...	...	...	...	...	...	1
Deputy Chief Authorised Officer	...	...	...	...	...	...	...	...	...	1
Duly Authorised Officers	...	...	...	...	...	...	...	...	...	6
Clerical Staff	...	...	...	...	...	...	...	...	...	3

GENERAL PURPOSES

Administrative Medical Officer of Health	...	...	...	...	...	...	...	...	...	1
Assistant Administrative Medical Officers of Health (including other duties)	...	...	...	...	...	...	...	...	...	2
Clerical Staff	...	...	...	...	...	...	...	...	...	6

IMMUNISATION

Medical Officer in charge of Immunisation	...	...	...	...	...	...	...	...	...	1
Assistant Administrative Medical Officer of Health for Diphtheria Immunisation	...	...	...	...	...	...	...	...	...	1
Medical Officer for B.C.G. Vaccination	...	...	...	...	...	...	...	...	...	1
Nurse Administrator of the Immunisation Section	...	...	...	...	...	...	...	...	...	1
Nursing Staff	...	...	...	...	...	...	...	...	...	2
Medical and Nursing Staff (Part-time)	...	...	...	...	...	...	...	...	...	14
Clerical Staff	...	...	...	...	...	...	...	...	...	22
Temporary Clerical Staff	...	...	...	...	...	...	...	...	...	12

TUBERCULOSIS
(Prevention and after Care)

Medical Director (Part-time)	...	...	...	...	...	...	...	...	...	1
Medical Officers (Part-time)	...	...	...	...	...	...	...	...	...	6

Tuberculosis Visitors	...	...	...	...	...	...	...	...	15
Domiciliary Diversional Therapists	...	...	...	...	...	...	...	...	2
Clerical Staff	...	...	...	...	...	...	...	...	8

STAFF WELFARE SURGERIES

Medical Officer for Staff Welfare	...	...	...	...	...	...	...	...	1
Nursing Staff	...	...	...	...	...	...	...	...	3

PUBLIC HEALTH INSPECTORS

Chief Public Health Inspector	...	...	...	...	...	...	...	...	1
Deputy Chief Public Health Inspector	...	...	...	...	...	...	...	...	1
Divisional Public Health Inspectors	...	...	...	...	...	...	...	...	2
Senior Rodent Officer	...	...	...	...	...	...	...	...	1
Senior Shops Act Inspector	...	...	...	...	...	...	...	...	1
Enforcement Officer	...	...	...	...	...	...	...	...	1
Inspectorial Staff	...	...	...	...	...	...	...	...	60
Pupil Public Health Inspectors	...	...	...	...	...	...	...	...	30
Food and Drugs Sampling Officers	...	...	...	...	...	...	...	...	4
Clerical Staff	...	...	...	...	...	...	...	...	24
Miscellaneous Manual Staff	...	...	...	...	...	...	...	...	39

Inspection of cowsheds and dairies, and of meat and other foods is carried out by the Veterinary and Food Inspection Department.

HOUSING INSPECTORS

Chief Housing Inspector	...	...	...	...	...	...	...	...	1
Deputy Chief Housing Inspector	...	...	...	...	...	...	...	...	1
Divisional Housing Inspectors	...	...	...	...	...	...	...	...	2
Inspectorial Staff	...	...	...	...	...	...	...	...	11
Draughtsmen	...	...	...	...	...	...	...	...	4
Clerical Staff	...	...	...	...	...	...	...	...	16

SMOKE INSPECTORS

Chief Smoke Inspector	...	...	...	...	...	...	...	...	1
Deputy Chief Smoke Inspector	...	...	...	...	...	...	...	...	1
Inspectorial Staff	...	...	...	...	...	...	...	...	7
Smoke Control Area Advisers	...	...	...	...	...	...	...	...	2
Clerical Staff	...	...	...	...	...	...	...	...	5

MILK AND DAIRIES INSPECTORS

Senior Milk and Dairies Inspector	...	...	...	...	...	...	...	...	1
Inspectors	...	...	...	...	...	...	...	...	4
Milk Samplers	...	...	...	...	...	...	...	...	2

ANALYTICAL LABORATORY

City Analyst	...	...	...	...	...	...	...	...	1
Deputy City Analyst	...	...	...	...	...	...	...	...	1
Laboratory Staff	...	...	...	...	...	...	...	...	11
Clerical Staff	...	...	...	...	...	...	...	...	2

WORKS DEPARTMENT

Manager of Works	...	...	...	...	...	...	...	...	1
Technical Staff	...	...	...	...	...	...	...	...	3
Clerical Staff	...	...	...	...	...	...	...	...	5
Manual Staff	...	...	...	...	...	...	...	...	36

MISCELLANEOUS STAFF

Manual Workers (Laundry Workers, Drivers, Storemen, Cleaners, etc.)	122
---	-----	-----	-----	-----	-----	-----	-----	-----	-----

Telephone :
Central 7000
Ext. 52



PUBLIC HEALTH DEPARTMENT,
THE COUNCIL HOUSE,
BIRMINGHAM, 3.

*To the Chairman and Members
of the Health Committee.*

August, 1959.

It is with pleasure that I present to you my Report on the Health of the City in 1958.

The pattern of the Report remains the same and the contributions have again been made by sectional officers throughout the Department who have had the opportunity of expressing their own opinions, with which I entirely concur. I would express my sincere appreciation for their efforts which have been made at a time when there has been extreme pressure of work throughout the Department, added to which, at the crucial time, printing difficulties were encountered.

As each year passes an endeavour is made to restrict, without impairing efficiency, the size of the Annual Report. In this respect there has been little achievement, simply because the work of the Public Health Department increases year by year as new legislation is brought into operation and refinements beneficial to the community are made to already existing personal health services. It is possible as time passes to stabilise action necessary with new legislation, but it so often happens that when this stage is reached additional legislation has been made and the administrative wheel is once again turning in new fields. The Food Hygiene Regulations, made under the recent Food and Drugs Act, made necessary increased activity on the part of technical officers of the Department to ensure that new standards in the Regulations were adequately applied. During the past year these technical officers had to contend also with the Rent Act and added interest in improved grants under the Housing (Financial Provisions) Act, 1958. There has also continued, during 1958, the shortage of inspectors.

Environmental Health Service

Despite the difficulties mentioned above and additional administrative work, the total number of inspections made by public health and specialist inspectors increased from 209,499 in the previous year to 236,955 in 1958. Over 192,000 inspections were made by public health inspectors, 27,900 by Shops Act inspectors and over 26,500 by rodent control inspectors. Eighty-one per cent. of the total visits related to the general environmental public health services. The inspectorial staff of the Department have greatly assisted in effecting the supplies of poliomyelitis vaccine to general practitioners. They dealt with no fewer than 5,794 calls throughout the year. This arrangement was

decided upon as the most efficient and economical, as in the majority of cases an inspector would probably pass a general practitioner's surgery in the course of his day's work. This obviated the necessity for setting up special departmental transport which would have involved additional staff and vehicles. Technical officers have also been concerned in an increasing number of visits in connection with the control of infectious disease. As mentioned elsewhere, this is part of the liaison between the Department and the General Practitioner Service. Over 10,000 visits were made to cafes, restaurants, hotels, eating houses, etc., food factories, bakehouses, licensed premises where food is sold and special visits to licensed premises.

During 1958, 96 clearance areas were represented which comprised 4,322 houses and it is recorded in the body of the Report that the total number of houses so far represented as unfit out of 18,000 scheduled for such action under the current five-year programme has reached 13,146 leaving a balance of 4,854. To this number should be added, however, the almost certainly low estimate of 7,000 unfit houses still to be dealt with at the conclusion of the present five-year programme. Considerable progress has thus been made in the slum clearance programme, aided by the procedure of acquisition and deferred demolition. The latter has the effect of providing much needed housing accommodation for a number of years which would otherwise have been demolished as unfit. The extensive improvements which are undertaken in these houses, although admittedly they do not bring them up to the standard of a fit house in all respects, nevertheless enable a large number of citizens to live under better conditions until such time as modern houses or flats are available for rehousing all the occupants of houses included in the slum and redevelopment programmes. Reference to this is also made later in dealing generally with the ten-year survey of the personal health service, as it is impossible to isolate the housing of the populace as a departmental function from the many other activities of the Department which are maintained for the preservation of the health of the community.

Epidemiology

In the field of epidemiology, 1958 was outstanding for the fact that not a single case of diphtheria occurred in Birmingham. Nine of the ten cases of this disease occurring since 1953 had never been immunised and one, a mild case, was overdue for the reinforcing injection. The results are a triumph for preventive medicine and a forcible reminder of the need for continuing to protect every child.

Again in the first few weeks of the year a severe respiratory infection occurred among young babies and necessitated the admission of many to hospital for oxygen therapy which in nearly every case was life saving.

The widespread influenza epidemic which began in August 1957 extended through January and February of 1958 when many adults were affected but few deaths occurred.

Illness described as " Food Poisoning " was again fairly common but it must be stated that in the majority of cases the part (if any) which food and drink played was not ascertainable.

In the past three years paratyphoid has become rare. There were four cases in 1958.

The total of 43 confirmed cases of poliomyelitis was surpassed in the last fifteen years in 1955 (84 cases), 1952 (48 cases), 1951 (52 cases), 1950 (442 cases), 1949 (68 cases) and 1947 (166 cases). The maximum effort is being made to immunise as high a proportion of the susceptible population as possible as soon as possible. When this has been achieved a marked and sustained fall in incidence can be expected as has been the experience in diphtheria.

Immunisation against whooping cough is now paying good dividends. There were only 1,876 cases notified, this being a third to a half of the usual number occurring up to five years ago, since when there has been a marked downward trend. Furthermore, deaths are now rare.

Scabies has been on the increase steadily since 1953, the number of cases treated having doubled in that period.

As judged by hospital statistics, the almost three-fold increase in gonorrhoea during the present decade is to be noted in comparison with the fall in cases of syphilis. Even in syphilis, however, the fall was interrupted by a progressive rise in the years 1955 to 1957.

Vital Statistics

The City's estimated population as at June 30th, 1958 was 1,095,000, a decrease of 8,000 since 1957. The population continues to fall slowly but steadily in spite of the sustained rise in the birth rate since 1956. The birth rate for 1958 was 17.60 per thousand population and was the highest recorded since 1949. After the first month of life the chances of survival of babies continues to improve, no doubt due, at least in part, to slowly improving environmental conditions, parental knowledge and standards of child care. For the past four years, however, the stillbirth rate in Birmingham, and in the country as a whole, has been relatively static and the death rates during the first week and first month of life continue to show an adverse trend in Birmingham but to improve in the country as a whole. Illegitimate babies of this age have less chance of survival than legitimate babies and the fact of the percentage of live born illegitimate babies remaining distinctly higher than it was four years ago is having an adverse effect upon the death rates in the first one and the first four weeks for the City as a whole. It is, however, a fact that death rates of very young legitimate babies are also increasing and one looks to the question of maternal health and antenatal care as a factor in their prevention.

The death rate from all causes in 1958 was 11·02 per thousand population, the lowest death rate recorded was 9·8 in 1948. In this connection attention is directed to the item on " Vital Statistics " in the body of this Report, see page 54.

In my Report for 1957 it was mentioned that deaths from cancer were the highest recorded at that time. After a progressive rise since 1951 in deaths from this disease, it is pleasing to record that the total deaths in 1958 were 119 fewer than in 1957. Slightly fewer deaths from cancer of the lung and bronchus, stomach and breast and fewer deaths from leukaemia contributed to the more favourable situation.

SURVEY OF THE FIRST TEN YEARS OF OPERATION OF THE LOCAL HEALTH AUTHORITY'S PERSONAL HEALTH SERVICES

In 1952, Medical Officers of Health throughout the country were asked by the Ministry of Health to undertake a survey on the operation of the National Health Service Act since 1948 (5 years). The Ministry, this year, have made a similar request to Medical Officers of Health, but on this occasion a " brief general survey " of the services of the Local Authority in the wider setting of the National Health Service Act covering the 10 years 1948—1958 is required.

In presenting this survey, which relates purely to the personal health services, I would emphasise a belief which I have always held that the domiciliary services must run in the closest association with the environmental services if full achievement is to be effected. This has been the constant aim of this Authority and its officers.

Throughout there is the theme of co-operation, the Local Authority working in association with the other services provided under the National Health Service Act and kindred social legislation and with the work of voluntary and philanthropic associations.

During the immediate years following the inception of the Act, there was a constant desire to encourage co-operation, co-ordination and liaison between the various services as an essential to an effective National Health Service. Later the interdependence of the services became obvious ; this no doubt was a sequence to the effectiveness of the co-operation, co-ordination and liaison brought about through joint endeavour, discussion and action. Opportunity arises here to express appreciation for the goodwill and co-operation which has existed between the authorities and officers of the hospital, general medical, dental, pharmaceutical and local authority services.

There has been great progress in the integration of the domiciliary services of the Local Authority for the family unit. This has grown in strength with the support given by the general medical services, through the Local Medical Committee, and to a similar degree in connection with

the preventive activities of the Department, particularly immunisation against poliomyelitis and other diseases.

The personal health service is naturally popular as the benefits derived are, in the main, individual. Environmental health on the other hand is general rather than individual and not obviously spectacular in achievement. It has been necessary to ensure that this essential feature of Public Health has not been subjugated by the personal health service. Environmental health services are highly effective in preventing illness on a large scale and these, together with epidemiology, another "essential" in the field of public health, are major factors of the preventive machinery of the local authority.

In my Reports for 1950, 1951 and 1956, I referred to my contention that good housing was the foundation on which to ensure mental and physical health. Relentless action has been taken for the demolition of sub-standard property and for the take-over of such property; the latter so that improvements could be effected to enable the houses to remain in occupation for a number of years although this does not necessarily overcome the evil effects of the bad house—lack of through ventilation, of separate amenities and of a bathroom, etc. Rapid progress can be observed in the inner and outer ring wards of the City in the provision of living accommodation of a standard which will in the future ensure better health. Better housing should, of course, be related to cleaner air. Recent legislation—the Clean Air Act, enables a policy whereby proposals for better housing can be correlated with those for ensuring cleaner air by the gradual process of making Smoke Control Orders in areas of the City subject to redevelopment. This is being undertaken as part of Health Committee policy. In large industrial areas such as the West Midlands Conurbation, in which this City lies to the south-east, the full benefits of smoke control will be felt if all authorities vigorously pursue the policy of clean air envisaged by the Clean Air Act.

It is gratifying to observe the decline in tuberculosis brought about, to a great degree, by the advancement of medical science in the treatment of the disease. Better standards of living have also played a part.

There have been no radical changes in the day to day administration of the local authority personal health services and any expansion which has been necessary by reason of new legislation has been effected without any major alteration in the staff structure of the Department. Decreases in certain spheres of activity—of the health visitor and the domiciliary midwife—have been offset by increases in other ways. In the case of the health visitor, attendances at welfare centres for ante and post natal consultations have decreased, but alternatively her work with the family unit as a whole has more than occupied the time which would have been spent in the routine of welfare centre work. In the case of the midwife, the increasing tendency over the years for hospital confinement resulted

in a consequent decrease in the number of home confinements. There has, however, arisen the need for hospital authorities to discharge mothers from maternity hospitals prior to the 14th day, due to pressure on maternity bed accommodation. The majority of discharges take place prior to the 9th day, thus involving the midwife in work in the home of a kind which she did not have to perform when mothers remained in hospital for 14 days.

The problem of the aged has increased annually throughout the years since 1948 and is now a feature of daily life. Public awareness of the social services may have been a factor in pinpointing this problem, but the information which follows—a population trend from basic information kindly supplied by the City Statistical Officer—must also be taken into consideration. There were no fewer than 7,779 (estimated) more persons of 65 years of age and over in 1956 than in 1947. This increase may not appear to be excessive, but nevertheless is a large number when related to the possible demand on the personal health services, for it is often in the waning years that there is a need to rely on the statutory and voluntary services when old persons live alone or are in indifferent health, remote from relatives or friends.

Earlier mention has been made of interdependence of the services and attention was drawn to a trend in the midwifery service and particularly to the discharge of mothers from hospital prior to the 14th day. This is a typical example of economy in hospital beds which is effected through the services provided by the local authority for the reason mentioned earlier. In 1953, 2,079 mothers were discharged home between the 6th and 9th day and 531 between the 10th and 14th day. In 1958 there were 1,276 discharges before the 6th day, 2,241 between the 6th and 9th days and only 383 between the 10th and 14th day. Thus, although the percentage of mothers confined in hospital rises each year the work of the midwife does not decrease to the extent which statistics would suggest.

In the case of aged persons the local authority again is helpful in effecting a saving to the hospital authority by maintaining in their homes patients who would otherwise have to be admitted to hospital. This also applies to a lesser degree to cases of illness generally. Further, the availability of home nursing, home help and kindred services working with the general practitioner, enables the hospital authority to discharge a patient to the home for domiciliary treatment and care earlier than would be the case if these services were unavailable, thus releasing medical and surgical beds for cases awaiting urgent admission to hospital.

Mental Health, an added function of the Public Health Department, has been developed in a highly satisfactory manner with emphasis on community care ; this has now been covered by recent legislation. There

has arisen an excellent hospital—general practitioner—local authority relationship in this valuable work.

The Ambulance Service, another feature of the local authority service, has dealt with an ever increasing demand since 1948, working again in close association with the hospital and general medical services. The effectiveness of this service can be attributed to a large degree to the common purpose and understanding which has existed between the authorities and the staffs of all the services involved.

The extensive legislation of the years 1946—1950, set the pattern for a complete social service. The application and development of the pattern to the needs of the community was placed in the hands of the authorities. This arrangement allowed for personal as well as collective endeavour. The personal aspect concerned the staffs of the authorities and revealed the need for human understanding as a necessary feature of everyday work. The success of a social service, it is quite apparent from experience during the past ten years, rests to a great extent on effectively controlled administrative flexibility. Without this a service is prone to become rigid, complex and lifeless.

Care of Mothers and Young Children

The focal point for this activity is the Welfare Centre. During the ten years since the inception of the National Health Service Act there has been a spread of population and, to provide readily accessible amenities on new housing estates mainly on the periphery of the City, twenty additional welfare centres have been opened ; only one of these is situated in the City's inner ring. It was found in some instances mothers and their children had to walk long distances to welfare centres. In 1953, the City Council accepted a recommendation of the Health Committee that suitable provision could be made for welfare centres by adapting municipal houses, and this has been put into effect. This arrangement, together with the use of accommodation rented from Tenants' Associations and a Church, the latter as a temporary measure, has brought almost every point in the City within a mile of one or other welfare centre.

The Health Committee in 1951, decided that health visitors should work in closer relationship with general practitioners. The experiment to discontinue the provision of maternity and child welfare centres of the type previously built and to utilise adapted municipal houses was commenced in 1953. At the same time, general practitioners were encouraged to hold antenatal, postnatal and infant welfare clinics in welfare centres throughout the City. It should be mentioned that as long ago as 1922 this policy had been encouraged.

General practitioners were holding clinics, both antenatal and children's, at 13 welfare centres and health visitors or midwives were in

attendance at 12 general practitioners' surgeries in 1953. Good progress was made in this integration and, by the end of 1958, 47 general practitioners held clinics at 24 welfare centres and conversely health visitors attended 20 clinics held in the general practitioners' surgeries.

Two trends have affected this service of the Local Authority—the preference for hospital confinement and the desire to book a general practitioner for domiciliary confinement.

Attendances at antenatal clinics have generally decreased. In 1948, 84 weekly local authority antenatal clinics were held, these reduced to 65 by 1952 and to 45 by 1958. Thirty-eight of the 45 in 1958 were combined antenatal and children's clinics. Individual mothers attending the clinics decreased proportionately. In 1948 there were 11,283 attendances falling to 7,419 by 1952 and to 2,635 by 1958. Postnatal examinations were similarly affected. Five thousand and ninety nine examinations took place in 1948, 2,089 in 1952 and only 652 in 1958. The number of clinics held by general practitioners increased. In 1956, 1,215 mothers registered with general practitioners for antenatal supervision at welfare centres, rising gradually to 1,397 mothers in 1958, with increased attendances from 6,992 in 1956 to 8,563 in 1958. Postnatal examinations at these general practitioners' clinics increased from 558 to 704 from 1956 to 1958. Over 7,000 examinations of children by general practitioners have been carried out each year between 1956 and 1958, either in local authority clinics or at their surgeries. General practitioners also co-operate by attending immunisation and vaccination sessions at welfare centres in addition to those at their own surgeries.

This general decline in attendance at welfare centres provided more opportunity for health education in the centres and in 1958, 7,221 mothers listened to talks given by health visitors. Training in relaxation commenced in 1957 for groups of midwives and health visitors, enabling classes in relaxation to be held at more welfare centres with increasing attendances by mothers. At these classes a physiotherapist or a specially trained midwife and a health visitor work as a team. General practitioners have referred mothers to these clinics. In 1952, 966 mothers attended at 15 different centres. By 1958, the catchment area had been extended to cover no fewer than 42 centres attended by 2,150 mothers. There are other forms of education at these centres—sewing classes and parents' evening meetings, which are in addition to the routine health teaching. These additional facilities have been especially well received by mothers on new estates and possibly relieve the loneliness which is consequent on the removal of families from their old environment to new areas on the outskirts of the City.

As part of the administrative arrangements for the integration of the services, the welfare clinic has been developed as the centre to which hospital authorities, general practitioners and the lay public can turn

for help and coincidentally there has been an expansion in the work of the health visitor as the basic social worker for the whole family.

Welfare centres now accommodate staff other than health visitors. Home nurses work from many welfare centres, while the eight District Home Help Organisers have their offices in eight centres strategically placed so as to cover the City, thus bringing the staff of the three services into closer personal contact. It is equally beneficial to the community to have available staff who can deal with many of the personal problems which so often arise. If the welfare centre staff cannot personally deal adequately with a situation they can refer the matter by telephone to the appropriate section of the Department at headquarters. Thus the domiciliary services have been decentralised. The Welfare Department hold occupational therapy sessions for handicapped persons and Probation Officers hold, in one or two instances, report centres at these welfare centres. The Audiology Clinic in connection with which consultants in the City work in close association with medical officers of the Department, is held at a welfare centre, and all dental clinics are held in these centres.

The dental service for mothers and children commenced operation in this City in 1920. In 1948 it was staffed by one whole-time dental officer and two part-time officers. Staff difficulties were encountered between 1949 and 1953. In 1949 the whole-time dental officer resigned and the service was reduced to three sessions per week, augmented by assistance from the School Dental Service. The response to this arrangement was very disappointing and in 1951 a new system was evolved for the supply of dentures to mothers at School Clinics. Early in 1952, by the employment of three part-time officers, seven treatment sessions per week were available. The present whole-time Senior Dental Officer was appointed in 1953, and it has been possible to build up the force of dental surgeons by the employment of part-time dental officers. At the end of 1958, 16 part-time dental officers were employed giving 49 sessions per week to maternity and child welfare dentistry. Late in 1953 a co-ordinated programme to provide clinics to serve most of the City to avoid patients travelling long distances was inaugurated. Two dental hygienists appointed in 1955 proved useful in carrying out scalings for mothers and for giving chair-side talks to mothers and children and talks to other groups. It is regretted that both resigned and up to the present it has not been possible to replace them.

With staff fluctuation, treatment was often disrupted. The total number of attendances in 1948 was 10,041, the lowest ebb in attendances was in 1951—1,763. The numbers have now gradually risen to 21,929 in 1958. The number of extractions during this period has decreased, but the supply of dentures has remained fairly constant.

DAY NURSERIES

The children of mothers undertaking essential work were admitted to day nurseries in 1948. In July of that year there were 48 day nurseries,

including one 24-hour nursery, providing accommodation for 2,217 children. At the end of 1948, 2,335 children were on the nursery registers with a waiting list of 5,407. The fees for accommodation were reduced from 18/- to 3/4d. per week when the National Health Service Act came into operation.

Recommendations were made by visiting inspectors of the Ministries of Health and Education as to the training of nursery nurses in 1948. These related to the reduction of numbers of children in Maycrete nurseries from 60 to 50 with a proportionate decrease in numbers accommodated in adapted houses ; the provision of more lavatory accommodation, airing cupboards, etc., and of changing rooms for babies and milk rooms, involving structural alterations ; and the augmentation of play material and extra space for play were also recommended. The grant of 2/6d. per nursery place for play material, made by the Health Committee, was increased to 7/6d. and subsequently to £1 per nursery place per year. The latter is still available but is not completely used as equipment from nurseries which have been closed has been distributed to nurseries remaining open.

The demand for nursery places rose until 1949 when the waiting list was 7,881, and the Health Committee then decided on a system of priorities as follows :—

- (1) Children whose mothers are wholly or mainly responsible for the maintenance of the family.
- (2) Children whose mothers, although not at work, are permanently or temporarily unable to care for them because of confinement, illness, etc.
- (3) Children whose mothers are at work, irrespective of the social or economic circumstances of the family. (Note :—no admissions were in fact made under this).

Charges for accommodation in day nurseries steadily increased from 3/4d. per week in 1948 to 8/4d. in 1950. In 1953 non-priority cases were asked to pay a maximum of £3 per week and between the years 1955 and 1958 priority (1) cases (children whose mothers are the sole or main support of the family) between 11/3d. and 30/- per week. In 1958 the charge for class (2) priorities (children whose mothers are permanently or temporarily unable to care for them because of confinement, illness, etc.) was increased to a maximum of £2 per week and for non-priority children to £5 per week. In the priority groups charges are reduced in cases of need to that for meals only, 17/11d. where all meals are taken at the nursery.

Twenty-four day nurseries were closed between 1948 and 1958, because the demand for priority (1) and (2) nursery accommodation in the area had fallen and the units had become uneconomic. At the end of 1958 there were twenty-three day nurseries and one 24-hour nursery and

arrangements have been put in hand to close one further day nursery and the 24-hour nursery in 1959. The decline in demand is probably due to the priority system of admission and to the increase in fees, especially for non-priority cases.

In 1948, all meals, with the exception of two nurseries, were cooked and sent out from two central kitchens. A change was instituted in 1950. By the end of December, 1952, all nurseries cooked their own meals. Central stores of the Department despatched to the nurseries all food with the exception of meat, fish, bread and milk.

To summarise, in December, 1948 there were 2,217 places; 2,335 children were registered for admission and there was a waiting list of 5,407. In 1952, the number of places had reduced to 1,744, 1,524 on the register and a waiting list of 323. In 1958, there were 1,060 places with 800 on the register and a waiting list of 106. Average attendances in the period fell from 1,872 in 1948 to 674 in 1958.

Midwifery

This service has also been affected by the two trends mentioned in the preceding item. In 1948, 53% of all Birmingham deliveries took place in hospital; the percentage had increased to 59% by 1952 and by 1958 to 65%. In 1948 the percentage of general practitioner booked domiciliary cases was 18%, by 1952 it was 66% and by 1958—87%. It should not be overlooked that since 1949 mothers have been discharged under 14 days from hospitals to the care of the Local Authority service. In 1949 the number of these cases was 3,728 and in 1958, 3,890. Although the number of domiciliary confinements decreased, the discharge of mothers from hospital under fourteen days increased the work of the midwife, because the greatest percentage of discharges under fourteen days took place prior to the ninth day when much care is still required. In 1953 there were 2,079 mothers discharged between the sixth and ninth days and only 531 between the tenth and fourteenth days, increasing in 1956 to 3,099 between the sixth and ninth days but falling to 400 between the tenth and fourteenth days. In 1958 there were 1,276 discharges before the sixth day, 2,241 between the sixth and ninth days and only 383 between the tenth and fourteenth days.,

The procedure of booking the general practitioner for home confinements, which has been encouraged by the Department, has influenced calls made for medical aid. In 1949 medical aid was requested in 472 instances where the doctor had been booked and in 2,250 cases where the midwife had been booked. In 1958 the number was 1,886 for doctor booked cases, and in midwife booked cases, 739.

There has been a steady rise in the use of gas and air from 884 cases in 1948 to 3,996 in 1958. Pethidine, first administered in 1950 to 1,218 cases, was administered to 3,498 cases in 1958.

In 1948 fifty-one sets of premature baby equipment were issued to domiciliary midwives and, during 1949, 412 premature babies were nursed in their own homes. In November, 1950, the full-time care of premature babies on the district was commenced, additional midwives having been trained for this purpose and since then an average of 163 premature infants per annum have been born and nursed at home.

Ninety-seven premature babies born in hospital in 1951 were discharged to the care of premature baby midwives. This number had increased to 555 by 1953 and the level has been maintained.

Midwives have worked increasingly since 1922 in close collaboration with general practitioners and health visitors at antenatal clinics held by general practitioners in either their own surgeries or in welfare centres, and between 1948 and 1958 the number of sessions per week had doubled—36 clinics in local authority premises and 64 sessions in the general practitioners' own surgeries.

Health Visiting

The health visitor—the basic social worker—is now concerned with the whole family as distinct from her originally more narrow function of providing care for mothers and young children. In 1952 for the first time the Annual Report mentioned the work of the general health visitor with the aged in addition to the work of the special health visitors; visits to general practitioners, co-operation with hospital authorities in the follow-up of cases, visits in connection with rehousing on grounds of medical priority and the after-care of tuberculosis. General health visitors in 1952 dealt with 189 aged people, this figure had increased to 972 in 1957 and in 1958 it was 1,292. Two hundred visits were made to general practitioners in 1952 but the figure has reduced slightly since that date. The housing visits necessary in considering housing applications on grounds of medical priority numbered 5,665 in 1952, but have gradually receded to between 500 and 700 per annum (see page 43). The health visitor will continue to be concerned with a steady flow of such applications. Health visitors since 1952 have carried out between 5,000 and 7,000 visits annually as part of the Medical Research Council's study of tuberculosis vaccines.

In 1948, health visitors paid 19,234 visits to expectant mothers. This number reduced to 8,259 in 1952 and by the end of 1958 it was 5,619. Postnatal visits decreased from 1,852 in 1948 to 322 in 1958.

Special visits paid to children under five years in 1948 were 13,784, 17,454 in 1952 and has remained constant since then. In 1958 16,354 visits were made.

The trends toward hospital confinement and greater utilisation of the general practitioner have permitted the health visitor to devote the necessary time to the wider aspects of her duties.

In collaboration with hospitals in the City, visitors have been attached to specific hospitals for follow-up work. This commenced in 1952 with one health visitor appointed for work in the Children's Ward of the Birmingham General Hospital. The visitor later transferred to the Children's Hospital. Gradually this work has grown and health visitors are now working in co-operation with hospital staffs in the wards at Selly Oak, Dudley Road, Little Bromwich, Orthopaedic and the Accident Hospitals. At the Queen Elizabeth Hospital the health visitors deal with adult patients, giving instruction in the Antenatal Unit Block. Health visitors are attached to diabetic clinics at the General and Selly Oak Hospitals. These visitors form a link between general practitioner, hospital and Public Health Department. A health visitor has personal interviews with mothers attending the Birmingham Maternity Hospital and provides group instruction for mothers attending the hospital relaxation clinics. The health visitor has been mentioned as occupying a key position in regard to mental health (see page 47) and now takes part in group discussions with mental health workers at a number of centres. In the discussions she meets workers from allied fields, i.e., the Children's Department, Housing Management Department, Tuberculosis After-Care, the School Health Service and members of the Family Service Unit.

It will be observed that whilst welfare centre routine has diminished since the operation of the National Health Service Act, the importance of the work of the health visitor increases from year to year with consequential benefit to the community. The field of activity is unlimited, as can be seen in the references which are made to this work throughout the Survey.

HEALTH VISITOR TRAINING

A revised syllabus of training came into operation on the 1st January, 1950 to meet the expansion of the health visitors' duties. This included new sections on physical and mental welfare, social, industrial and economic conditions and administrative provisions; the ethics and technique of health visiting and the technique of teaching health education. Student health visitors undertake a comprehensive training designed to cover three academic terms. In this City a change from the seven months' training to a course of nine and three-quarter months' duration was made in September of 1951. Student health visitors have received, for several years, lectures on the preparation for old age and care of the aged, and accompany general health visitors, special health visitors for the care of the aged and infirm, and district home help organisers on their field visits. Observation visits are paid to a geriatric unit and clubs and homes for the aged. The older members of the community are included among selected families visited by students in the latter part of their training. Student health visitors are also responsible for preparing papers for discussion on the welfare of the aged. Since the

inception of the National Health Service Act, 409 students have been trained of whom 404 obtained the Health Visitors Certificate.

Home Nursing Service

Home nursing in this City was dealt with by the City of Birmingham District Nursing Association prior to 1948 who employed, when the Service was taken over by the Local Authority, the whole-time equivalent of 73 nurses. The demand on the Service since then has made it necessary to increase the staff of nurses to a whole-time nurse equivalent of 163·2 in 1958. In 1948, 278,383 visits were made, the number has increased yearly to 644,036 in 1958. The average number of visits per nurse in 1949 was 3,468 ; it was 3,950 in 1958 and the average number of visits per patient rose with the increase in nurse equivalents from 23·14 in 1949 to 30·81 in 1958. In the early years after 1948 hospitals and general practitioners were clearly assessing the value of the Service. General practitioners referred 11,000 cases in 1950, in 1952—15,342 and in 1958—15,660. Between 1950 and 1952 hospitals referred 2,000 cases per annum since when there has been a gradual reduction to 714 referrals in 1958. Cases requiring nursing at home which were ascertained by members of the Health Department have varied little, numbering about 150 per annum. Various refinements of nursing which benefit a patient could not be undertaken fully until 1953 because the Service was overburdened. Nineteen fifty-three was the peak year for new cases—20,192—and also for cases of bronchitis nursed at home, which numbered 2,533. About this time the effect of the problem of the aged was being felt throughout the Department. It can be instanced so far as this Service is concerned by the carry-over of cases from year to year and, to a large degree, by the number of cases nursed suffering from bronchitis (See below). Carry-over cases have steadily increased from 1,478 in 1949 to 4,075 in 1958. Of the total case load in 1953 (22,753), 8,549 were in the age group 65 and over, equivalent to 37% of the total patients nursed. In 1958 the total in this age group was 10,122 persons which represented 48·5% of all cases, whereas the increase in the total number of cases in that period was only 25%. The carry-over of cases from year to year in this age group doubled between 1953 and 1958 and was 1,396 and 2,678 respectively. It can reasonably be assumed that an increased proportion had either—(1) a chronic terminal illness or (2) prolonged stay in bed. Both involved a greater demand on daily visiting. With inadequate nursing reserve it was found difficult to meet this demand in the early years of the National Health Service. The number of cases of bronchitis and carcinoma nursed in the aged has increased from, in the case of bronchitis 491 (1950) to 2,018 (1958) and carcinoma, from 878 (1950) to 1,058 (1958). Advice is given by nurses to persons assisting in the care of the patient on the best method of dealing with illness in old people, the rehabilitation of the patient and the need to stimulate

the patient's mental and physical understanding and activity. This is an important feature of the nurses' daily work which involves visits of longer duration than in routine nursing cases. Such advice lessens the tendency for friends and relations to keep the aged person in bed despite medical advice to the contrary. This latter course can, however, be understood as there is a feeling of assurance when the patient is in bed that he or she is out of harm's way. There is a similarity in the later stages of carcinoma—enfeeblement and a need for daily visiting.

Records have been kept for some years of the number of cases of certain classified diseases nursed—cardiac, pneumonia, bronchitis, diabetes, arthritis, carcinoma, senility, stroke, tuberculosis and surgical cases. There were 8,236 cases of these diseases in 1950 which was 51·2% of the total cases. The percentage has varied between 51% and 53% over the years, other than in 1953 and 1954 when it was 57% and 56% respectively.

Among the classified diseases, cardiac disease, bronchitis, carcinoma, senility, tuberculosis and surgical cases accounted for the greatest number. Cardiac cases represented 14% of the total classified cases in 1950 and there has been little variation other than in the years 1956 and 57—16% and 18% respectively. Bronchitis accounted for only 10% of the classified cases in 1951 but has gradually risen to 18% in 1958. Carcinoma, in 1950, was responsible for 10% of the classified cases. There was a reduction in 1953 to 6% but since then a gradual rise to 9% in 1958 has occurred. Cases of senility fluctuated little—between 6% and 9%. It was to be expected that the improved position in regard to tuberculosis would be felt by the Home Nursing Service—this was the case. The peak year was 1953 when the percentage of all classified cases was 9·5, then came a gradual decline to 7·4% in 1956 after which the decline was rapid to 2·9% in 1958. Thirty-nine per cent of the classified cases in 1950 were surgical and this remained constant until 1953 when there was a sudden drop to 23% remaining in the lower twenties since then.

Epidemics create a problem to any nursing service but are reminders that it is vitally necessary to maintain a staff at full strength in order that a complete nursing service should be maintained.

In 1954, as part of the Home Nursing Service, an experimental domiciliary service for infants and children was inaugurated. This was arranged in conjunction with the Institute of Child Health, in particular with the Professor of Paediatrics and Child Health. In addition to providing the best available nursing service in the home, one of the main purposes was to promote still further a live integration and close co-operation between general practitioner, local authority and hospital service, utilising in this case the district nurse as the link. This service operates in the centre of the City and involves two nurses. In both cases the areas are overcrowded with much unsuitable housing. By 1958 2,368 children had been attended in their own homes requiring 22,876 visits.

The Home Nursing Section of the Personal Health Service thrives on the utmost co-operation with the general practitioner and works in close association with the Home Help and Night Watcher Services. Additionally, bathing attendants, sickroom and nursing equipment and the domiciliary laundry service, mentioned elsewhere in this Report, complete the arrangements for the domiciliary care of patients nursed in the home during illness and prior to admission and after discharge from hospital.

Vaccination and Immunisation

Whilst the section of the Department concerned with this matter has, since the inception of the National Health Service Act, played an ever increasing role in the Public Health Service, it is nevertheless interesting to recall that by the end of 1938, 123,000 children had received a full course of protective inoculations against diphtheria since the scheme was started in 1925, and no death from diphtheria of an inoculated child occurred between 1925 and 1938. Prior to 1948, free protection was provided only against diphtheria and smallpox, but in the ten years from 1948 to 1958, this has been extended to afford protection against five illnesses—diphtheria, whooping cough, tuberculosis, poliomyelitis and smallpox.

General practitioners and hospitals have co-operated in immunisation activities for many years. In 1938, for instance, 1,575 children were immunised against diphtheria by general practitioners with material supplied free of charge by the Public Health Department.

The combined prophylactic, diphtheria/whooping cough, was introduced into the Local Authority Scheme in this City in 1957. Vaccination against tuberculosis by B.C.G. was first given in 1949 to eight Mantoux negative contacts of active cases. Immunisation against poliomyelitis was first introduced in 1956—the Health Department alone carrying out the immunisation. By 1958, as the poliomyelitis scheme expanded, general practitioners were asked to co-operate and since then have done a considerable amount of work. The staffs of hospitals were also involved in protecting hospital medical and nursing staff and their families. To enable the vast programme of immunisation in the City to be effectively carried out, which involved 186,000 children in the age group 5—15, it was necessary to seek the further assistance of the Education Authority to hold immunisation clinics in schools. General discussion took place in 1956 between the two Committees and the officers of those Committees and with the Head Teacher Organisations, and immunisation teams now visit over 500 schools in the City.

The health education programme was intensified to promote greater interest and this was supplemented by press publicity.

Information now follows on the work of separate programmes within the Immunisation Section of the Department :—

DIPHTHERIA IMMUNISATION

Diphtheria, in 1948, was still a serious problem in the City. There were then 165 confirmed cases of diphtheria which was a decrease from the previous year, 1947—223 cases. In the same year (1948) there was a rise in case mortality from 1·3% (1947) to 3% and five deaths occurred from this disease, two of this number were children who had been inoculated. In 1952 there were only 13 cases, two of the cases died, neither having been immunised. There was no case of diphtheria in 1958. In 1948, 23,025 children were immunised against diphtheria; 19,000 by the staff of the Public Health Department and the remainder by general practitioners. In addition, nearly 18,000 supplementary doses were given. An interesting feature is the immediate increase in the number of children who received inoculation by general practitioners after the National Health Service Act came into being. In the first half of 1948 only 1,273 children received primary immunisation from the family doctor but in the second half the figure had risen to 2,507. From 1948 to 1956 there was a small but consistent decline in the total number of children immunised against diphtheria. Only 16,268 were immunised in 1956. Combined diphtheria/whooping cough immunisation was introduced by the Ministry of Health in 1957 as a local authority scheme, and the total number of children immunised against diphtheria in 1958 rose to 19,656, the increase being entirely due to the use of the combined vaccine. This variation in figures hides the increasing proportion of immunisation which has been carried out by family doctors which has increased from 37% in 1950 to a peak of 58% in 1957 but fell slightly to 52% in 1958. It is very satisfactory to record that in the whole of the last six years fewer cases have arisen than in the first month alone of 1948. In the last three years no deaths have occurred from diphtheria and in the last two years no cases have arisen through being infected in Birmingham.

B.C.G. VACCINATION AGAINST TUBERCULOSIS

Eight Mantoux negative contacts of active cases of tuberculosis received B.C.G. vaccination in 1949. In 1954 vaccination was offered for the first time to thirteen-year old schoolchildren, and in 1957 it was offered to diabetics, who are particularly susceptible to infection with tuberculosis, should they come into contact with it. Throughout the period Mantoux testing and subsequent B.C.G. vaccination of nurses has been undertaken on behalf of certain hospitals.

A full-time medical officer was appointed for B.C.G. vaccination in 1954 when 695 Mantoux negative contacts were vaccinated and 9,026 Mantoux negative schoolchildren were dealt with. In 1958 the number of Mantoux negative persons vaccinated was 1,505 contacts and 11,638 schoolchildren. There is no doubt that B.C.G. vaccination has played an important part in the control of tuberculosis.

The medical officer for B.C.G. vaccination is now also involved in the general immunisation programme.

WHOOPING COUGH IMMUNISATION

It was only in 1957 that the Ministry of Health formally approved the general use by local authorities of combined diphtheria/whooping cough prophylactic. Since 1950, however, records have been maintained in the Department of children who were immunised by family doctors with the combined vaccine. In 1950, 354 such primary immunisations were notified to the Department. This figure of children immunised rose steadily to 5,205 in 1956. With the introduction of the free combined vaccine in 1957 the number rose to 8,213 and in 1958 to no fewer than 15,697 children immunised in the year. With the greater use of this protective immunisation against whooping cough, it has been observed that the incidence of whooping cough is on the decline and it is expected the decline will continue.

POLIOMYELITIS

When this immunisation was introduced in 1956, 4,564 children received a primary course of inoculations. In 1957 there were 34,446 persons immunised and in 1958 this figure had almost quadrupled to 128,915 persons who received two injections. In the first two years, poliomyelitis immunisation was carried out solely by the medical staff of the Public Health Department but in 1958 general practitioners were invited to co-operate which they readily accepted and in that year of 128,915 persons receiving two injections, 71,799 received treatment through Departmental arrangements and 57,123 were dealt with by general practitioners. It is too early to assess the results of this vaccination, but first impressions are promising. A separate section in the Department dealing solely with the poliomyelitis vaccination was created to cope with this exceptional programme. Without the co-operation of the general practitioners, hospital medical staffs and hard work by clerical staffs in the Department, it could not have been effectively operated.

SMALLPOX

This vaccination is carried out solely by general practitioners, the material being supplied by the Public Health Laboratory Service. Records are kept by the Department. In 1948, 41·9% of children under one year of age were vaccinated against smallpox. Little variation took place in the intervening years between 1948—52 but since then there has been a steady rise in the percentage of children vaccinated—36·6% (1952), 44·9% (1957) and in 1958—44·1%.

GENERAL PRACTITIONER CO-OPERATION

References to this have been made throughout this Survey but it may prove interesting to summarise the value of their work in immunisation and vaccination alone. In 1958, general practitioners undertook no

fewer than 67,191 immunisations against diphtheria and poliomyelitis and so that liaison which is so vital in this work can be maintained at all times, the unit mentioned earlier was formed to deal solely with general practitioners' requirements of vaccine against whooping cough and diphtheria and poliomyelitis. In 1958 vaccine of various kinds was distributed by this Department to general practitioners sufficient for 152,478 injections.

The impression may be created from the foregoing that the Immunisation Section is an isolated unit within a large Department ; this is not so. In the immunisation of young children considerable help is received from health visitors by encouraging parents to have their children immunised. The Health Education Section gave assistance in the preparation and distribution of posters and literature in addition to lectures to various groups throughout the City. The Statistical Office of the Department despatches to the parents of each child born in Birmingham a leaflet drawing attention to immunisation. Considerable co-operation is received from the Chief Education Officer and his staff and also the headmasters and headmistresses in the arrangements for clinics to be held in schools. It must be said that without this overall co-operation the numbers of children immunised in this City would have been significantly smaller and the epidemiological picture far less favourable.

Ambulance Service

The Ambulance Service, because its work is so readily measured by statistics, reveals more vividly the increased activity experienced in the Personal Health Services.

In the first full year of operation, 1949, the removal service dealt with 198,167 cases, and each year the number of cases has gradually risen to 340,762 in 1958. Accident service ambulances (these are operated from fire stations and manned by firemen) have been utilised increasingly. In 1949 they dealt with 11,894 accident cases. This type of case rose steadily to the final total in 1958 of 15,005. The Hospital Car Service (operated by the British Red Cross Society and handling removal cases) dealt with 8,632 cases in the year 1949 and this number had increased to 13,153 in 1958. The total yearly cases rose sharply until 1954, since when there has been some levelling off in demand. The total increases between 1954 and 1958 were relatively small, but a fairly substantial increase in 1958, together with other factors, appears to indicate that the demand on the Service has not yet reached its peak. Information follows on the various sections of the Service :—

REMOVAL SERVICE

The major part of the increased demand on the whole Service fell on the removal section. The number of cases in most classifications has increased pro rata, for example, admission, discharges, transfers

and mental cases. The most persistent increase has been in clinic cases ; this appears to reflect an expansion of hospital out-patient facilities. The number of tuberculosis cases dealt with has declined for the reasons mentioned elsewhere in this survey. Maternity and infectious cases remained at a fairly constant level.

With increased ambulance traffic to and from recovery hospitals outside the City and due to the effect of the movement of the population from central areas to new estates on the outskirts of the City, distances patients have to be carried have tended to increase. Traffic conditions have deteriorated in the City, no doubt due to the build up in the total number of vehicles on the road, but it has been possible to meet the demands on the service with relatively small increases in staff and vehicles. This can be ascribed to improved accommodation and facilities, organisational improvements—co-ordination of journeys, etc., the meal break parking scheme and the effective liaison with hospitals and finally, and by no means least, the installation of short-wave radio. Mileage per patient carried steadily decreased during the period under review. There was, however, a spectacular decrease in 1957 in comparison with the previous year when a similar number of cases were carried—an average saving per month of some 5,500 miles was achieved. This coincided with the first full year of the operation of short-wave radio in ambulances.

ACCIDENT AMBULANCES

Here the increase has been steady. Originally, eight accident ambulances were located on 7 fire stations. In 1956 a new station at Sheldon was opened and an additional accident ambulance was situated here. The most significant trend is the increase in street accidents involving vehicles.

The Catastrophe Procedure—a predetermined plan to provide the necessary ambulances and equipment in the event of a large scale accident or public disaster—was operated, on a modified basis under mutual assistance arrangements with neighbouring local health authorities, when the major train disaster at Sutton Coldfield occurred. In the light of experience gained from disasters in other areas, the arrangements for this service are kept under review in co-operation with the Regional Hospital Board and other interested parties.

HOSPITAL CAR SERVICE

Approximately 3·5% of the total case load is carried by the British Red Cross Hospital Car Service on behalf of the Ambulance Service. This may appear small in relation to the whole, but the assistance in carrying suitable sitting cases is most valuable. It should not be overlooked that the drivers give their services voluntarily and only receive a mileage allowance on an agreed scale.

The St. John Ambulance Brigade provide valuable assistance by making available, in the evening and at week-ends, from one to three

ambulance crews. These crews also assist by manning accident ambulances on fire stations to augment the accident ambulance cover on special occasions when this is considered desirable.

The voluntary members of the above mentioned organisations, together with the Women's Voluntary Service, act as escorts to patients being conveyed by rail. This is greatly appreciated by the patients.

Another feature of service arrangements with outside authorities is that which has been built up with British Railways and other local health authorities in the conveyance of patients by ambulance/rail/ambulance. In 1958, no fewer than 1,076 cases were transported in this manner, despite the limitations imposed on this arrangement by the development, on a number of routes in the area, of diesel trains. These, whilst designed to give maximum carrying capacity, have no privacy or stretcher accommodation and are unsuitable for stretcher cases. Prior to this development the conveyance of patients by this method had been persistently followed and was generally regarded as the most comfortable from the patients' point of view, and the most economic to the Authority. The guiding factor in the conveyance of cases by this means has been medical opinion in each particular case.

CO-ORDINATION AND CO-OPERATION

Requests for ambulance transport normally emanate from general practitioners and hospitals (the latter being the largest single user) and the most effective control of the use of ambulances can be exercised at these levels. To achieve this, publicity has been given to the need for co-operation between the various services concerned with the ambulance service. From time to time hospitals have been reminded of the importance of appointing a transport officer within the hospital. Invitations have been extended to both medical and administrative staffs of hospitals to visit Ambulance Service headquarters to see the control room operations, to discuss any difficulties which arise from time to time and to exchange ideas. This liaison, not only with the hospital but with the general medical service, has been of immense value in the promotion of economical efficiency with consequent benefit to patients. Section 27 of the National Health Service Act has been interpreted in spirit rather than in the letter, nevertheless a degree of uniformity has been attained in creating a standard of need, and applications for transport which do not fall within the responsibility of the Ambulance Service, are now rare.

Hospitals have provided parking facilities and effected improvements at hospital entrances and thus expedited the work of the Ambulance Service. The lack of adequate centralised waiting rooms at the larger hospitals has, however, retarded operations considerably and accommodation difficulties have also been experienced.

Prevention of Illness, Care and After-Care

This section of the National Health Act is the statutory link between the curative and preventive services and also enables the local authority to institute preventive services supplementary to those set up under specified sections of the Act, viz.—home nursing, home help, etc. To achieve success in its operation complete liaison is essential. The sphere of activity is great—health education, after-care of the tuberculous and the mentally ill, rehousing on medical grounds, the loan of nursing and sick room equipment and fireguards, the provision of a domiciliary laundry service and the social service for the care of the aged and infirm. This not only involves staff engaged on the personal services of a local authority but on many occasions technical officers of the Department whose help may be enlisted to alleviate nuisances causing anxiety in the family. Bathing attendants and night watchers are statutorily provided under this section although they are features of the Home Nursing and Home Help Services respectively.

Bathing attendants are specially selected women who undertake the bathing of patients, thus enabling the home nurse to devote more of her time than would otherwise be the case to nursing duties.

Night watchers take over family care duties in the evening. These men or women generally work from 8.0 in the evening until 8.0 the following morning and prove most effective in cases of prolonged illness where stress and strain is affecting the family circle. The breadwinner or breadwinners of the family, through the presence of the night watcher, are able to have a full night's sleep and to continue in full employment which otherwise might be impossible.

MENTAL HEALTH

The item on Mental Health (See page 46) has covered aspects of the work of the Department on this subject.

Problem families involve work by many, if not all, sections of the Department from time to time, and also other Corporation departments and voluntary associations. The focal point of activity is, however, the Psychiatric Social Service. In 1958, five home helps were set aside for use by the Psychiatric Social Service with these families. The helps work under the supervision of the social worker, although administratively they form part of the Home Help Section of the Department. Ninety-eight problem family children benefited from the services of a home help in 1958. These cases are often of long duration.

There is no "Co-ordinating Committee" as such but potential problem families receive consideration by a Case Conference which comprises officers of the Children's, Education and Health Departments, a member of the N.S.P.C.C. and such other officers of the social services as may become involved. It is not only concerned with the problems

of the adults in the family but equally with overcoming the necessity for children to be admitted to the care of the Children's Committee. In these latter cases the Home Help Service is of immense value in maintaining children in the home. These helps, it has been found, stimulate in the minds of the parents a sense of responsibility.

PREVENTION AND AFTER-CARE OF TUBERCULOSIS

The Chest Clinic (known as the Anti-Tuberculosis Centre for many years previously) has been the focus of the activities of the Local Health Authority. As part of the local health service prior to 1948 it was curative as well as preventive, and still is. Despite the fact that the two activities, treatment and prevention, are now separated by law there is no line of demarcation in effect. The Chest Clinic still functions as the central point for initial contact, treatment and after-care of patients suffering from this disease. The combination of two separate services performing as a smooth and effective whole reflects the foresight of the Health Committee and Regional Hospital Board in making this arrangement which has, with personal endeavour, achieved an excellent relationship between the officers of the two authorities throughout the past ten years. The medical and senior administrative staffs are part-time officers of both authorities whilst the more junior staffs are employed by the separate authorities—a mere paper transaction which passes unnoticed by patients attending the Chest Clinic.

In ten years a great change in tuberculosis has been witnessed due, to a large degree, to the introduction of medicines effective against the organisms responsible for the disease. Better food, better housing and education of the public in health matters should not, however, be overlooked and could not be entirely dismissed as factors in the reduction in the number of cases and of deaths. This reduction of deaths has been great, no less than 80% between 1948 and 1958—696 and 143 deaths in the years respectively. In the age group 25 years and under the reduction is more striking—from 147 to 6 deaths for these years. The fall in notifications has been less—1,294 in 1948 to 1,039 in 1958. This trend has had an effect on waiting lists for treatment in hospital. In 1958 there was no waiting list and the position has now been reached where all patients can promptly be admitted for treatment on diagnosis. General practitioners have, as in other fields, co-operated very fully in this work. The joint arrangements between hospitals and Local Authority work on a team basis—the chest physician at the Chest Clinic is also the physician in the hospital and, as head of the team is, therefore, responsible for the patient from the time when the general practitioner refers the patient for treatment, for giving treatment in hospital and for after-care on discharge to the care of the general practitioner who continues to work in unison with the Chest Clinic in after-care.

B.C.G. vaccination of school leavers is regarded as a long term investment in prevention and, after five years' work in this field, some signs can be detected in the reduction of tuberculosis. Adequate liaison exists, as mentioned elsewhere, for prompt vaccination of suitable contact children. Between the years 1952 and 1957 a special residential nursery was maintained for the isolation of children from patients whilst B.C.G. was becoming effective but, with the reduction of waiting lists and the prompt admission of sputum positive patients to hospital, the need for this nursery dwindled until it was decided to close it.

Each tuberculosis visitor is a member of the chest physician's team and is responsible for a specific area of the City. She regularly discusses her cases with the chest physician and passes to him any special problems she encounters. Each visitor is equipped with the Heaf apparatus and tuberculin tests are performed and read by the visitor in the home, if necessary. Thus the child makes only one visit to the Chest Clinic, for X-ray. Little change has taken place in the work over the years but emphasis has been placed on the full development of contact examination.

The item on " Home Nursing " makes reference to nursing tuberculosis cases but mention should here be made that home nurses, in 1955, carried out 63,747 injections in the home. By 1958, as waiting lists for hospital admission declined, the number of injections had fallen to 20,381.

Attention is directed to the item which follows on " Rehousing on grounds of Medical Priority " related to the needs of the tuberculous patient.

With increased numbers of patients receiving domiciliary treatment there was a need for occupational therapy in the home, on the lines of that given in hospital. In 1952 an occupational centre in the Department was formed working with the Chest Clinic although separately accommodated. The centre provided ambulant patients with facilities for handicraft activities and special equipment which could not be made available to housebound patients. Here again the decline in the number of cases of tuberculosis has lessened the demand for this service.

HEALTH EDUCATION

Prior to 1944, Health Education in the City was provided by the Birmingham Council of Social Hygiene on behalf of the City Council by two full-time lecturers. The syllabus was mainly concerned with sex education and venereal disease. Health education now sets out to educate the community in healthy living. People should not only be instructed in measures to prevent the onset of illness but their attention should be directed towards the attainment of optimum health. This state is not merely a freedom from disease and ill-health but a continual striving towards a better development and balance of bodily and mental health.

In 1944, the Health Committee took over the functions of the Birmingham Council of Social Hygiene. A Health Education Sub-Committee had been formed in 1943 to develop the service on the lines already mentioned. Additional lecturers were appointed for work in the schools, and health visitors undertook lectures in girls' schools. The organising staff was augmented. An Assistant Medical Officer was placed in charge of the section. So that every aspect of Public Health could be covered by experts, the staff of all sections of the Department have been utilised as lecturers. Every health worker in close contact with the community has a potential in conveying knowledge and health practices to a great many people in the City.

In 1947 there were 41 ancillary lecturers (members of the staff), today there are over 170. An extensive library of reference books and visual aids is maintained and added to yearly, together with charts, films, film strips, flannelgraphs, picture pamphlets, leaflets, etc. Artists of the Department prepare educational material, posters, exhibitions, film strips etc. Their work is constantly added to the library. Various methods of health education are employed—individual teaching, probably the most successful, is carried out by health visitors and other social workers in the home. Informal talks are given as part of additional facilities at welfare centres ; these are well received by mothers. The duration of the talks is approximately six minutes. Talks to various groups and organisations is another method. This is undertaken at welfare centres, the Teachers' Training College, grammar schools, secondary modern schools, nurses' courses, Scout and Girl Guide organisations, and by talks to medical and dental students. Additional group talks are given to youth organisations, clubs, continuation schools, industrial apprentices, women's organisations, social groups, young wives' clubs, study groups, parent-teacher groups and the Darby and Joan clubs. Another important feature is the talks given at Winson Green Prison, at remand homes, approved schools and probation hostels.

In 1948, the number of lectures totalled 2,438 and there has been a steady increase to 4,301 in 1956. Due to the reduction in the number of organising staff, there has been a slight decrease in lectures during the last two years. Owing to difficulty in meeting the commitments for health education in boys' schools (this is undertaken by the male organising staff) in-service training was given to nine male district nurses. The programme of school work was completely revised, charts were prepared and instruction given to the nurses in teaching technique and methods. These male nurses are now being utilised to full advantage. It is felt that by the extensive use of the staff of the Department as a whole in health education, working in close association rather than as isolated units, and the integration with other Corporation Departments, the hospital authority and with voluntary organisations which has taken place, much has been achieved in bringing to the notice of the community the value of health education.

SUPPLEMENTARY SERVICES TO THE SPECIFIC SERVICES PROVIDED UNDER OTHER SECTIONS OF THE NATIONAL HEALTH SERVICE ACT.

At the beginning of this item it was suggested that Section 28 permitted the authority to supplement "specific" domiciliary services by services for the prevention, care and after-care of cases as required and this allowed the authority some latitude in applying its resources. Details of such services now follow :—

HOME NURSING SERVICE

Loan of Nursing and Sick-Room Equipment

The range of equipment has been continually enlarged and improved after consultation with manufacturers. The number of items loaned has grown between the years 1952 to 1958, from 4,011 to 9,346 respectively. In the case of invalid chairs alone, there are 27 different types available to meet the need of each particular patient. Special attention has been directed to lifting aids, both to assist the nurse and the patients. There has been a growth in the loan of commodes of various types from 90 in 1952 to 1,060 in 1958. This is indicative of a change in nursing practice which greatly improves conditions both for the patient and those responsible for his immediate care. It is further evidence of the increasing number of aged and infirm people being cared for in the home.

Walking aids of various types are made available and are used very effectively in the rehabilitation of patients.

Loan of Fireguards

In 1953, there was a publicity campaign for the prevention of accidents from burns, and this scheme was instituted for use in really necessitous cases. These are mainly problem families with young children and the elderly infirm. Since the inception of the scheme, the number of guards loaned has grown each year and the total issued to date is 1,065. After allowing for 468 returned as no longer required, there remained on loan at the end of 1958, 597.

Domiciliary Laundry Service

In 1951 this service was instituted to provide on loan and to launder blankets and bedlinen at a small charge to the patient, assessed according to financial means. Where there is incontinence the difficulty of laundering such articles at home is thus overcome. At that time authority was given for a maximum of 100 cases, but this has since been increased and for several years now the numbers of persons receiving the service at any one time has remained stable at approximately 200. 2,744

persons altogether have benefited. Persons of pensionable age and over are the main beneficiaries. Eighty-two per cent. were of pensionable age and, of the remaining 18%, only 4% were under 40 years of age. The following small table may be of interest :—

Age groups of patients

Women over 60 years of age	...	...	...	...	...	57%
Men over 65 years of age	...	...	...	...	...	25%
Women under 60 years of age	...	...	...	...	...	8%
Men under 65 years of age	...	...	...	...	...	10%

This service is one of the factors which allows hospital patients to be returned to their home expeditiously and thereafter nursed at home. A large number of persons receive the service during a terminal illness and in this respect the following figures prove interesting :—

Numbers receiving the service from 1951—1958	...	...	...	...	2,744
Service discontinued—died	...	...	...	...	1,230
removed to hospital	...	...	...	...	842
other reasons	...	...	...	...	459
Still on books at 31/12/58	...	...	...	...	213
					<hr/> 2,744 <hr/>

Bathing Attendants

This scheme was also commenced in 1951 and was known at that time as a nursing attendants' service—to attend on the elderly and infirm who did not require skilled nursing attention. In 1951 it was said that their work had been helpful in relieving the heavy case load of the district nurse. The orderlies were then employed on a part-time basis together with one member of the St. John Ambulance Brigade who worked in a voluntary capacity. The orderlies later became known as bathing attendants. The attendants, usually housewives, were taught to give blanket baths and to undertake simple toilet under the supervision of trained staff. They were provided with green overalls and carried toilet requisites which could include a hair dryer. By 1957 there were 17 bathing attendants who, in that year, visited a total of 5,806 people and gave 19,664 baths, an increase of 1,000 baths over the previous year. In 1958, 15 bathing attendants were employed who visited 5,587 people and gave 19,931 baths.

The above supplementary services operate as part of the Home Nursing Service. Departmentally, however, the nursing arrangements are dealt with by the Chief Nursing Superintendent and the Steward of the Home Nursing Service is concerned with the loan of nursing equipment, fireguards, etc., in addition to staff administration.

HOME HELP SERVICE

Night Watchers

By 1950 it had become obvious there was a need for helping in cases of prolonged illness at home during the night hours and in many cases this related to old people living alone. The intention of the service was to relieve relatives who had been sitting up at night with the patient to enable them to have their night's rest and thus be able to carry on with their normal employment. In many instances the relatives are the bread-winners.

In October of 1950 the service was commenced and proved difficult to maintain initially. In 1951, 18 watchers were employed, and although the number has not considerably increased since then, 23 in 1958, the service has been greatly appreciated.

This service is administered by the Home Help Organiser as part of the Home Help Service.

CARE OF THE AGED

The problem of the aged, as met by the various staffs of the Department, has already received comment. It is no new problem and no doubt existed for many years but, with the expansion of the social services and the public awareness of the facilities provided by them, more people in this category have been brought to light than would otherwise have been the case. It is difficult to give a true picture of the personal endeavour which is made by the staff of the whole Department to this needy section of the community and above all the amount of human understanding which is shown when they are confronted with lonely, ill and aged persons.

From basic information obtained from the Statistical Officer of the Corporation the following figures have been calculated. These cover the years 1947, 1951 (the census year) and 1956. In 1947 and 1956 aggregate populations estimated by the Registrar General have been utilised. In 1947 the population of the City was estimated at 1,086,000, the 1951 census gave a figure of 1,112,685 and in 1956 the estimated population was 1,110,800. The division of the population into three age groups shows the gradual increase in the number of aged persons who live in the City :—

<i>Age Group</i>	<i>1947 No. in age group</i>	<i>% of total popula- tion</i>	<i>1951 No. in age group</i>	<i>% of total popula- tion</i>	<i>1956 No. in age group</i>	<i>% of total popula- tion</i>
0— 4 ...	103,707	9.5	99,685	8.96	84,400	7.6
5—64 ...	882,472	81.3	909,603	81.75	918,800	82.7
65+ ...	99,821	9.2	103,397	9.29	107,600	9.7

NOTE : The 1947 age analysis is the Registrar General's estimate while that for 1956 has been estimated by the City Statistical Office.

The child population (pre-school 0—4) during the ten years has reduced from 103,707 to 84,400—as percentages from 9·5% to 7·6%. In the large age group, 5—64, the population has remained fairly constant as a proportion of the whole—882,472 in 1947, gradually rising to 918,800 in 1956 (increase from 81·3% to 82·7%). In the age group 65+ there has been a rise in population from 99,821 in 1947 to 107,600 in 1956—a percentage rise from 9·2 to 9·7. As a matter of interest the age group 65 and over has been divided into three phases, 65—74, 75—84 and 85 and over, for the same years, as shown in the table below :—

<i>Age Group</i>	<i>1947</i>	<i>% of total population</i>	<i>1951</i>	<i>% of total population</i>	<i>1956</i>	<i>% of total population</i>
65—74 ...	70,420	6·5	71,257	6·4	70,800	6·4
75—84 ...	25,939	2·4	28,475	2·5	32,400	2·9
85+ 	3,462	0·3	3,665	0·3	4,400	0·4

In the age group 65 to 74 the population varied little—70,420 in 1947 to 70,800 in 1956. On the other hand, the number of persons in the age group 75—84 increased between 1947 and 1956, 25,939 in 1947 to 32,400 in 1956. In the age group 85 and over there were 3,462 persons in 1947 and 4,400 in 1956. This increase, when related to the possible demand on the personal health services, is considerable as in these older age groups greater reliance is placed on assistance from outside the family circle—either the local authority, the hospital or the voluntary association.

This trend in population substantiates the wise provision which was made in the early years for the care of the aged and the infirm by developing the existing services of the health visitor, home nurse and the home help and the seconding for special duties, of health visitors to deal solely with the aged.

The statements herein on these services refer to the effect which an increasingly aged population has had on them. Mention, however, has not been made of the arrangements for the bathing of elderly people at the Cleansing Station of the Department. They are taken by car at regular intervals to the Cleansing Station where they receive a bath and shampoo. Bath lift apparatus has been provided for the more infirm.

Prior to the introduction of the National Assistance Act, 1948, powers existed under the Birmingham Corporation (General Powers) Act, 1929, for the medical officer of health, after certification in writing that a person was aged or infirm or physically incapacitated and resided in premises which were insanitary or, alternatively, was suffering from

any grave chronic disease and unable to receive proper care and attention, to make application to a Court of Summary Jurisdiction. The Court, subject to the examination of the person by a registered general medical practitioner, could order his removal to a suitable hospital or other institution.

Under the Birmingham Corporation Act, 1935, if the medical officer of health certified that a dwelling house was in an insanitary condition and the occupier unable, owing to infirmity or mental incapacity, to remedy the condition and that his health was thereby endangered, a Court of Summary Jurisdiction could, on the Corporation's application, make an Order for the occupier's removal to an institution for a period sufficient to allow the Corporation to cleanse and disinfect the dwelling house.

Prior to 1948, with a view to action under the above-mentioned Acts, a number of cases were investigated every year. In 1948 the National Assistance Act became operative, and under Section 47 of this Act application can be made to a Court of Summary Jurisdiction for an Order to remove an aged person in need of care and attention to a suitable institution, provided it is certified by the medical officer of health that removal is in the interest of the person concerned or in the interests of others. Before Court application is made, seven clear days' notice must be given to the patient and to the person managing the institution to which the patient is to be removed. This waiting period of seven statutory days prevented many cases being compulsorily removed until such time as it was too late for them to benefit from hospitalization. A number of patients in the years 1948 to 1951 died before appropriate action could be taken under the Act.

The National Assistance (Amendment) Act, 1951 was introduced to remedy this defect in the earlier Act. Under the Amendment Act, where the medical officer of health is authorised by his local authority, he can apply to a Court of Summary Jurisdiction, or a Justice of the Peace, for an Order for the compulsory removal of a person without giving any previous notice of intention—provided removal is considered necessary by the medical officer of health and one other registered medical practitioner. This Amendment Act has made it extremely rare for a person for whom action is considered necessary under the National Assistance Act, to die before the appropriate action can be taken.

In comparing the work undertaken under the sections of the National Assistance Acts, 1948 and 1951 for the period 1948 to 1958, it is interesting to note the striking fall in the number of cases investigated which occurred in 1955, and was at that time put down to the unusually good weather during the summer and autumn of that year, although it was pointed out in the Annual Report of that year that, as more home visiting was undertaken, fewer elderly persons were neglected until compulsory removal from their homes might be considered.

CARE OF THE AGED—COMPULSORY REMOVAL OF OLD PERSONS
UNDER NATIONAL ASSISTANCE ACTS.

	YEAR										
	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
(1) Cases investigated	87*	114	96	87	94	83	88	37	34	30	42
(a) Male ...	—	—	31	—	—	—	—	6	4	7	8
(b) Female ...	—	—	65	—	—	—	—	31	30	23	34
(2) Compulsory removal ...	2*	3†	—	—	3	4	6	—	—	5	2
(a) Male cases } Under	—	—	—	—	—	—	1	—	—	—	—
(b) Female cases } 1948 Act	—	3	—	—	2	2	—	—	—	1	—
(c) Male cases } Under	—	—	—	—	—	2	1	—	—	—	1
(d) Female cases } 1951 Act	—	—	—	—	1	—	4	—	—	4	1
(3) Voluntary admissions to institution	20	—	20	—	9	17	24	11	8	3	11
(4) Other arrangements (or death)	—	—	28	71	44	32	34	12	9	8	12
(5) Certified under Lunacy Acts ...	—	—	—	—	—	6	10	5	3	1	1
(6) Removal not required. Domiciliary services adequate ...	65	—	48	16	38	30	30	14	17	14	14

* Under National Assistance Act, 1948 and Birmingham Corporation Acts, 1929—1935.

It is now clear, as the number of cases investigated annually has remained low since 1955, that these low figures represent the vastly improved visiting both by voluntary and statutory organisations, which allows deterioration in the condition of aged and infirm persons to be brought to light and dealt with before their compulsory removal from home must be considered.

Throughout the ten year period, female cases have predominated over males, and the differing sex ratio of cases is maintained even in the lower number of cases now investigated.

In the earlier years, 1948 to 1950, it is interesting to note that in the great majority of cases no action was considered appropriate. Now, although compulsory removal or voluntary admission to an institution may not be desirable, alternative arrangements are often possible for aged persons. The figures of action taken under the National Assistance Acts of 1948 and 1951 are a clear indication of the value of services provided by the Public Health Department, by other Corporation Departments, by family doctors and hospitals and voluntary organisations to provide a better service for the aged residents of this City in their own homes.

This work, although arduous and difficult of solution, with no end result in achievement so far as permanently improved health is concerned, is very worthwhile and is the means of comfort to many old people in their waning years. If correspondence can be used as a yardstick of appreciation, then the arduous work of the staff is rewarded even though at times they may not realise it. The team spirit which has existed now for a number of years in this field is of the highest order and embraces the members and staffs of all the statutory and voluntary services.

RECUPERATIVE CONVALESCENT CARE

Since 1948 recuperative convalescence for those not requiring medical attention has been provided by the Authority. Prior to 1957 an excellent arrangement was in being in collaboration with the Birmingham Regional Hospital Board and the United Birmingham Hospitals whereby almoners of the hospitals in the City made arrangements for convalescence, both for hospital and for general practitioners' patients. It nevertheless made very heavy demands on the work of the almoner and with regret they had to be relieved of it. In consequence a revised scheme was made. Hospital almoners are now responsible for only hospital patients and the Department deals with recommendations made by general practitioners. The demand has tended to increase. An interesting feature is revealed by the trend of referral. Of the total number of cases in 1954, 54% were referred by general practitioners. This percentage had increased to 81% by 1958. In 1958, 765 cases were recommended for convalescence, 618 accepted, 147 did not accept, of whom 97 decided against convalescent care as they did not wish to leave

home. In 30 cases health had deteriorated and they had become unfit for convalescence. The greatest number of cases accepting convalescence was in the age group 45 to 64—199, followed closely by the age group 65 to 74 with 175 cases. There were 79 cases in the age group 75 and over. It was possible to make arrangements for 19 mothers to have convalescent care and these mothers took with them 21 babies.

The Birmingham Hospital Saturday Fund, a voluntary organisation, has received from the Health Committee each year a grant of £550. This Fund makes arrangements for the convalescence of patients who are contributors to its scheme and in 1958, 6,423 patients received the benefit of this. Of this number 5,712 were accommodated in homes owned by the Fund. The Fund also assists a number of contributors who have to take convalescence under the arrangements made by the Department. It also accommodates patients in the Fund's homes who are not contributors to the Fund but who are taking convalescence under arrangements made by the Department. Charges are made to the Department for these services.

HOUSING—PRIORITY IN REHOUSING ON MEDICAL GROUNDS

Various sections of this Survey have referred to the care and attention which is directed to the alleviation of detrimental housing conditions. An important function of the Department is the assistance given to persons claiming consideration to priority rehousing due to some medical condition ; this latter needs to be substantiated by medical evidence.

The City Council's Points Scheme, which came into operation on the 1st January, 1953, made an allowance of up to a maximum of 30 points on health grounds where there was a substantiated medical condition which, taken in conjunction with other housing conditions in which the family was living, warranted a degree of priority in rehousing. These points would be in addition to points awarded by the Housing Management Department for lack of accommodation, length of time on the waiting list and various domestic difficulties such as sharing the toilet and cooking facilities, inconvenience of water supply and sink, etc. In addition to recognising the need for rehousing due to a medical condition, the Housing Management Committee allocate a quota of houses each year for families whose need for rehousing on medical grounds is extremely urgent and who do not qualify for rehousing on points even if 30 are awarded on health grounds.

By discussion between the Committees and the officers and later co-operation between those officers, a system was devised to deal effectively with these cases. All valuable information relating both to the housing circumstances and the medical condition is assembled in connection with each case. The Housing Management Department initiates this action and later submits the case to the Public Health Department. A visit, either by a medical officer, health visitor or technical officer, is then

carried out. If information is desired on the medical condition, the medical officer may refer to the patient's doctor, prior consent having been received from the patient to do this. If correspondence proves inadequate, discussion then takes place. Success in this operation has been achieved with the utmost co-operation of general practitioners. Medical officers usually visit the cases where the description of the living conditions and of the illness in report form do not permit of an accurate assessment of the degree of priority. Enquiries are not confined to Birmingham alone. Medical officers of health of other areas have been requested to make visits to applicants to obtain the necessary information so that an assessment of the degree of priority of an applicant living outside Birmingham can be made. This application may have arisen through personal family reasons or from the employment of the breadwinner being in Birmingham.

When full information has been obtained, consideration is given to the assessment of priority, two medical officers working independently, each making his own particular recommendation. The report is then passed to a senior medical officer who is responsible for making the final decision and for making further enquiries where a difference of opinion between the two medical staff previously dealing with the recommendation has occurred. Claims for priority may be received from a number of sources—from consultants and almoners in the hospitals from general practitioners and members of the City Council. It has been the practice to inform all persons in respect of whom a recommendation has been submitted of the extent of any recommendation which has been made by the Department.

This work has revealed a large number of cases of bronchitis as well as asthma as these diseases are extremely common grounds for recommendations for priority rehousing. In very few instances the living conditions have been found to be the specific cause of the illness, in which case high priority has been advised. The vast majority are cases which would benefit in a general way by improved surroundings but this improvement would not be expected to be dramatic.

In cases of wounds, arthritis, paralysis and heart disease, the problem is, in many instances, the difficulty experienced in living upstairs. This arrangement applies equally to mothers of young families who, in many cases, use upstairs bed-sitting rooms with cooking facilities downstairs. Arthritic patients experience difficulties when the toilet facilities are upstairs or too far down the garden. These are factors to which the utmost consideration is given. The most difficult assessment to deal with is in the case where there is a claim that mental ill-health is being caused or aggravated by housing conditions. The help of the Mental Health Section of the Department is invaluable in such cases. A great many of the families interviewed have revealed varying degrees of mental stress which was their real reason for requesting priority though in actual fact

the disease for which they claimed priority was a physical condition. Unhappiness caused by unsatisfactory living conditions is common, so common as to be usual among lodgers. This, however, is not the subject of the allocation of points. Where definite ill-health has occurred because of quarrels with other occupants in the house, especially where the families are related, points have been awarded.

In 1953, the year the points scheme came into operation, 8,625 cases were dealt with. The numbers since have receded and now range between 3,000 and 4,000 per annum. In 1957, of the total number of 3,737 applications, 1,295 claimed consideration through conditions of asthma or bronchitis. Nervous conditions existed in 812 cases. In only 67 cases were the maximum number of points awarded. Twenty points were awarded to 339 applicants and 10 points to 1,341 applicants. In 27 cases of applicants with the maximum number of priority points, a review was carried out but the assessment was not altered. In the lower points range, 145 with 20 points and 470 with 10 points were similarly dealt with. One thousand one hundred and eighty-seven applicants claimed medical priority who had not previously been reviewed and were not allocated any points. Alternatively, 161 cases with no medical points but who had previously claimed priority were reviewed and still no points were added.

Statistics have been kept in a very simple form although there is detailed information about each family. The figures quoted above represent the number of times an assessment of medical priority has been made. They are greater than the number of applicant families dealt with as numerous applicants repeatedly ask for reconsideration of their degree of priority, approaching the Department directly and sometimes through third persons acting on their behalf.

Domestic Help Service

The problem of the aged and infirm has had a profound effect on this section of the service, necessitating considerable development since 1948. 145 home helps (67% full-time and 33% part-time) were employed in 1948, the number had increased to 507 (18% full-time and 82% part-time) in 1952 and by 1958 the total number of helps was 893 (7% full-time and 93% part-time). Of the part-time workers—93% (including 23 night watchers) in 1958—66% worked under 30 hours per week.

On the inception of the Act, home helps mainly dealt with domiciliary confinements. 82% of all the cases fell in this category, 11% involved illness of the housewife and only 5% the domiciliary maintenance of aged people. The remaining 2% were miscellaneous and included the tuberculous. The increase in institutional confinements referred to elsewhere in this survey also affected this service as did increasing public awareness of the facilities available and the integration of the work with general practitioners and hospital staffs. In consequence the emphasis of activity changed—confinement cases decreased from 82% in 1948 to

17% in 1958. The need to supply help to the ill housewife has not materially changed—11% in 1948 to 16% in 1958; a radical change occurred in help for aged and infirm cases and the percentage rose from 5% of all the cases in 1948 to 63% in 1958.

The Health Committee in 1948 decided to decentralise the social services where desirable and the Home Help Service was included in this policy. Three District Organisers were appointed in 1953 who operated from welfare centres. Three more were appointed in 1954, again working from three welfare centres, and by 1955 decentralisation of this service was completed with the appointment of two further organisers, making eight in all.

With the expansion of the work of the health visitor to the whole family unit, the increase in the number of psychiatric social workers and the increased visiting of home nurses, many cases where the aged were in need of assistance were brought to light which otherwise may have remained unobserved.

Voluntary associations have continually extended their work in this field and operate in close association with the Department. Other sources of referral are the Welfare Department of the Authority and the National Assistance Board. Integration of all these activities has had a stimulating influence on this vital service from which much benefit has been derived by often helpless people living alone and dependent on us and the help of kindly friends and neighbours.

Mental Health

There was little to suggest in the Annual Report for 1948 that the Mental Health Service of this Local Authority might come to play a not inconsiderable part in its general functions. Indeed the new duties placed on the Department under Section 28 of the National Health Service Act, relating to mental illness generally, appeared to have been accepted with an apparent air of resignation and the subject was dealt with in little more than half a page. No indication was given as to how the service might develop beyond a reference to the possible employment in the future of psychiatric social workers. At that time the Psychiatric Social Service was in the hands of the local branch of the National Association for Mental Health. Nevertheless, as a result of the National Health Service Act, the term "Mental Health" appeared for the first time in an Annual Report of the Medical Officer of Health and its importance did not continue to be overlooked.

By 1953 mental health was becoming topical although with little meaning, but a gradual change in attitude to mental illness had been witnessed. The Mental Health Section of the Department was developing and the need for increased in-service training for integrating it with

other established services was recognised, together with the need to deploy the Department's personnel in such a manner that an effective contribution to prevention could be made. The service was by 1953 firmly entrenched departmentally, but a degree of isolation still prevailed. This was broken down by a slow, but firm integration with other sections of the Department and with the hospital and general medical services.

Departmentally the key position of the health visitor in this field has been utilised increasingly. Guidance on case work from workers more skilled in this particular discipline has been given to the health visitor and to whom, if problems become too acute, she can refer. Every effort is made to achieve recognition of early breakdown in family life and to marshall all forces to prevent it. Success has been achieved in this field by co-operation with many different bodies ; in the Local Authority with the Housing Management and Children's Departments, outside with the National Assistance Board and the National Society for the Prevention of Cruelty to Children and the Family Service Unit. This work has received considerable recognition from outside the City, and the Working Party on Social Workers in March, 1957, visited the Department to see the work in operation.

It has been said earlier in this item that the prevention of mental illness is a vital factor in social legislation and activity ; to this end for a number of years now, it has been the constant endeavour to expand the services in this field as a major development, i.e., to produce a trend away from hospital and towards community care, bearing in mind at all times that medical treatment plays an essential part in dealing with the mentally sick and this, in its specialised form, can only be obtained in hospital or at outpatient clinics. The development towards community care has, therefore, not been narrowly conceived as a function of the Local Health Authority alone, but rather developed in harmonious relationship with the hospital service. In promoting this service to the fullest extent, admission to hospital has not been considered an end in itself, but rather a phase in the patient's illness and, as in any other illness, continuity of action should be preserved, that is, early admission and then discharge as soon as hospital treatment ceases to be necessary. It has been appreciated that to be effective this service has had to work in the closest possible liaison with the hospital staffs and joint use, wherever possible, of the staffs concerned was the only way this could be achieved. This led to the reorientation of our services over the years towards those of the hospitals, by the psychiatric social workers and the duly authorised officers of the Public Health Department working as a team with the medical staff, rather than as separate entities. In the future it is hoped to bring health visitors into this aspect of the work. Since 1948 the mental health services of this Department have provided after-care facilities for two of the four mental hospitals in the City, and this will be extended to a third in the very near future.

There appears no cleavage of opinion between the various medical and social worker staffs, and the success of the community services in mental health can be attributed to this vital sense of mutual understanding. Statistics accumulated over the years give a picture of this. In 1955 the number of referrals to the Psychiatric Social Service of the Department was 344 ; 79 of these cases were referred from hospitals. In 1957 the number of referrals had risen to 509 ; 207 had been referred by hospitals.

Emphasis has thus far been placed on the understanding between the Local Health Authority and the hospitals. It is pleasing to recall that there has been a steady contact between the general medical service and the staff of the Department.

The problems of mental illness are likely to be greater in large cities. The yearly admissions to mental hospitals in Birmingham during the last ten years, were as follows :—

1949	...	...	...	1,584
1950	...	...	...	1,495
1951	...	...	...	1,667
1952	...	...	...	1,977
1953	...	...	...	2,152
1954	...	...	...	2,366
1955	...	...	...	2,760
1956	...	...	...	3,404
1957	...	...	...	4,367
1958	...	...	...	4,279

The enormity of the problem and the duties it imposes on the duly authorised officer are such that to some degree their solution depends on specialisation, but in this particular respect over-specialisation tends to lead to a too narrow conception of community care, to duplication in case work and to have a depressing effect on the officer himself. This danger is a very real one, indeed, some eight years ago our duly authorised officers were carrying out the duties limited to the Lunacy and Mental Treatment Acts. Fortunately, increased work has not accentuated this trend and they have moved away from their purely custodial duties and are taking a greater part in community care. Now they work in a team with psychiatric social workers and psychiatrists of the mental hospitals and in addition undertake work more particularly concerned with the aged and rehousing. In general, they have made a greater contribution and their work has become much more interesting.

A reference was made to the co-operation with other Corporation Departments. On this important aspect of the work it is felt necessary to enlarge on the earlier brief reference, and to refer specifically to the work with the Housing Management Department. There are in this City 115,737 houses in municipal ownership with the inevitable percentage of problem families. It has been arranged with the Housing Management Department to refer to the Psychiatric Social Service all tenant families with children under seven who are about to be taken to court for an order

for possession because of arrears of rent. In 1955 there were 144 such families, in 1956, 104 and in 1957, 63. In approximately one third of these cases it was found necessary to provide a continuing service, for it appeared that rent arrears were a symptom of deeper and more complicated problems. This work inevitably means interpreting their needs to other agencies, notably the National Assistance Board, and the social workers invariably act as a buffer between the family and other agencies who might inadvertently threaten it with destruction. Other disrupting factors have to be faced with the social workers' support—a multitude of debts and prosecutions for debts; the hire purchase variety; debts to statutory bodies such as the Gas and Electricity Boards, and to the Children's Department for children who may be in care. In 1955, of the 144 families referred to this Department by the Housing Management Department for rent arrears, none of the families were evicted and the rent arrears were reduced by over £600. Since then the numbers have fallen which may be attributable to the success of conjoint case work.

The care and training of the mentally handicapped has been a responsibility of the Local Authority for many years, but it was only in 1948 that the Health Committee in the City became involved. It would be unwise to suggest that great advances have been made since 1948, but attitudes have changed. Many more are given the chance of living in the community and better training facilities will soon be available to them.

A severely subnormal child is always a matter of grave concern in a family, something that is unavoidable and as yet apparently incurable, yet there is hope that we are at the beginning of knowledge about some of the causes of such conditions. Arrangements have been made for health visitors to carry out routine testing of urine aimed at early diagnosis of phenylketonuria, a rare condition.

It is pleasing to record that a medical interest in the problem of mental deficiency has been stimulated considerably and an atmosphere of hope prevails which had not existed before.

A decade, it is felt, is a comparatively short time in which to expect dramatic changes, but from what has been said and what has taken place nationally, considerable progress has been made by the provision of a growing mental health service which flourishes with other services providing benefit to the community, both outside and inside the Local Authority.

Community Relationship

It may have been revealed that throughout the Survey there has been a sense of common purpose and understanding, essential in the operation of a social service. This is not confined to the statutory bodies and the departments of the Local Authority who deal with the welfare of the community, but extends further to the field of voluntary activity. It seems that of all the Departments of the Local Authority, the Public Health Department has the greatest opportunity to establish community

relationship. This is achieved by personal contact with the family unit through the medical staff, social workers and technical officers and by contact through health education. Community relationship does not end with the visiting and educative services.

An encouraging tendency has arisen in recent years for people to accept advice from a public department. This may also be the case with the hospital and general practitioner services. To keep in step with this tendency, arrangements have gradually been built up within the central administrative organisation of the Department by encouraging administrative staffs to work in close association with domiciliary visitors and for them to adopt the same approach to members of the public calling in the administrative offices. The Medical Officer of Health today is likely to be consulted on a variety of matters which fall outside his jurisdiction and with the increase in this approach there has been a realisation in the public mind that the Public Health Department is available to give advice or assistance in all matters which may affect their personal health. Enquiry offices in central administrative departments have often been labelled as cold and indifferent, a place from which one may be referred elsewhere. To overcome this, the Enquiry Office of this department has been developed in such a manner that persons calling for advice or assistance can either be helped or if necessary be safely referred with a suitable introduction to the place or department where they will receive maximum benefit. They thus leave the building with a feeling that they have received the due consideration which their personal problem warrants.

The Enquiry Office has readily available the resources of the medical and senior administrative staff of the Department. The essential of effective community relationship in a head office is to have adequately experienced staff ready to deal with problems which may confront them throughout the day, and it is of equal importance that the staff should be sufficiently mature to appreciate the problems which arise in everyday life. Such an office is not only beneficial to the community, but is an effective means of liaison with the other services, not only of the Corporation but of the hospital and general practitioner services and voluntary associations. It is of little value providing competent medical, technical and social worker staff if administrative officers fail to appreciate the manner in which their colleagues carry out their duties and if their personal approach is at variance with the personal approach shown in domiciliary care.

Finally I would pay tribute to the staff of the Department as a whole for the excellence of their work and for displaying at all times the endeavour to achieve a first class service.

MATTHEW BURN,
Medical Officer of Health.

BIRMINGHAM

The census population for the City of Birmingham recorded in 1951 was 1,112,685. The estimated population in 1958 was 1,095,000. The area of the City remained unaltered at 51,147 acres, i.e., 80 square miles. The highest point of the City (roadway) is at Quinton on the western boundary, 736 feet, and the lowest point is on the eastern boundary at Chester Road, 267 feet. In the centre of the City the Cathedral gardens are 459 feet above sea level. The sub-soil east of a line from New Oscott to Lickey Hills is chiefly marl and sand ; west of this line is a belt of sandstones ; further west still is gravel and sand. This is a relatively modern city and enjoys world-wide reputation as a centre of industry and of progressive local government, regarded as the capital of the Midlands and the second city of Britain. Situated in the heart of the Midlands it is served by the main services of the air, road, rail and canal systems, and is 108 miles from London. The continuous succession of towns on the north and west comprise the " Black Country " of Staffordshire with its coal-mining, iron mining and metal working industries. Rural stretches of Worcestershire and Warwickshire lie to the south and east.

The City is renowned for its diversity of trades, which number some 1,500, and in consequence derives its title " Workshop of the World."

Climatology

Through the kind co-operation of Mr. A. L. Kelley, Director of the Meteorological Observatory (at Edgbaston) of the Birmingham and Midland Institute, it is possible once more to place on record the following information on the weather during 1958 :—

COMPARISON OF MEAN MONTHLY TEMPERATURES AND SUNSHINE
AND RAINFALL TOTALS FOR 1958 WITH THE AVERAGES OF THE PAST
65 YEARS

<i>Month</i>	<i>Shade Temperature °F.</i>		<i>Rainfall Ins.</i>		<i>Sunshine Hrs.</i>	
	<i>Monthly Averages 1958</i>	<i>Mean 65 years</i>	<i>Monthly Totals 1958</i>	<i>Mean 65 years</i>	<i>Monthly Totals 1958</i>	<i>Mean 65 years</i>
January	38·8	38·4	2·615	2·50	52·9	42·5
February	40·6	38·9	4·94	1·955	52·5	58·3
March ...	38·4	41·9	1·43	1·96	83·9	96·8
April ...	45·6	46·4	0·725	1·99	123·2	135·3
May ...	52·9	52·2	2·18	2·38	178·6	171·3
June ...	57·3	57·5	4·23	2·04	126·4	176·1
July ...	60·7	60·8	3·41	2·515	164·6	168·6
August	60·8	60·2	2·72	2·74	128·4	158·4
September	58·9	56·1	3·92	2·06	88·5	122·9
October	51·1	49·5	2·485	2·77	80·8	85·7
November	44·1	43·2	1·97	2·815	42·1	48·9
December	40·3	39·9	3·34	2·729	20·7	37·3
Year	49·1	48·8	33·96	28·455	1142·6	1302·1

WINDS

NUMBER OF HOURS DURING WHICH WINDS BLEW FROM 8 MAIN COMPASS POINTS

	N	NE	E	SE	S	SW	W	NW	Calm
1958	444	680	734	1089	1718	1537	1429	1083	46
25 years mean	638	897	632	830	1481	1738	1186	1289	70

The weather throughout most of the year was very changeable, very dull, rather wet and with mean temperatures a little above average. The deficiency of sunshine and, until the autumn, the lack of any prolonged spell of dry weather, will be the most prominent memories.

The winter months of January and February were rather mild and, in the case of February, excessively wet. January was sunny at times but otherwise normal with little snow. There were some rapid changes of temperature in February when snowstorms and sharp frosts were quickly followed by spring-like warmth and rapid thaws.

The early Spring was cold but dry ; after mid-April, it became much warmer and May opened with summer temperatures and was the sunniest month of the year. June was a dull and wet month and, although July sunshine was only a little below average, the dull and wet trend of weather persisted through the rest of the Summer and early Autumn and up to the middle of October, although from the middle of August to late November mean temperatures were persistently above normal. After the middle of October it was dry but cloudy up to the end of the first week of December when rainy and, at times, foggy conditions set in and lasted until nearly the end of the year.

TEMPERATURE.

The mean temperature for the year was 49·1 deg.F. which is 0·4 degree above normal. Eight months had mean temperatures in excess of average and of these February, September and October were outstanding whilst March showed the highest deficiency. The maximum shade temperature recorded was 79° on the 8th July, the minimum was 22° on the 9th March and the grass minimum was 11° on the 24th January. There were 44 air frosts and 66 ground frosts. Both these totals were below average.

RAINFALL.

The year's total 33·96 inches was 5·51 inches above average. The driest month was April and the wettest February with June a close second. It was the third wettest February on record. June 2nd was the wettest day with 1·275 inches. There were 199 days with 0·101 inch or more and 138 days with 0·04 inch or more.

SUNSHINE.

It was another very dull year the total of 1142·6 hours being 159·5 hours below normal. Only two months, January and May, had amounts in excess of the average. June, September and December had substantial deficiencies. The sunniest day was 21st May with 13·4 hours and there were 87 completely sunless days.

WINDS

These blew mainly from South-South-East and North-West which is a fairly normal distribution for the Midlands. March and April were the only months with a high easterly component. The mean hourly speed was 9 m.p.h., about one m.p.h. below average. The highest gust, 79 m.p.h., was registered on the 6th January which was also the only day upon which a wind of gale force occurred.

MISCELLANEOUS

Sleet or snow occurred on 27 days. Snow covered the ground at 9 a.m. on 14 days and fogs at the 9 a.m. observation were recorded on 30 days. Of these 8 were noted in November and 10 in December. Thunder or thunder-storms were registered on 12 days.

VITAL STATISTICS

Area : 51,147 acres, i.e., 80 sq. miles. This has remained unaltered since 1934.

Population : Census 1951 : (Final) 1,112,685

Home population, estimated by Registrar General	1952	1,119,000
as at 30th June. (Civilians plus H.M. Forces	1953	1,118,500
stationed in the area).	1954	1,117,700
	1955	1,111,700
	1956	1,110,800
	1957	1,103,000
	1958	1,095,000

The table shows the progressive decline in the City's population since 1952 and this during a period when thousands from overseas have settled here. There were in 1958, 3,200 houses known to be occupied by coloured people and a sample accommodated an average of eleven persons per house as compared with 3.36 persons per house for the City as a whole. The sample check indicates there are now in the City approximately :—

West Indians	24,000
Pakistanis	7,000
Indians	2,000
Somalis	700
Arabs	900
Africans and Others	600

Despite this immigration, which is coupled with a considerable influx from Ireland, and despite a natural increase of 38,459 (111,284 births minus 72,825 deaths), which has occurred during the period, the number of persons leaving the City has been even greater. While, during the period 1952 to 1958 the population of Birmingham has decreased by 24,000 in spite of considerable immigration, published figures indicate that, in the same period, Birmingham's immediate neighbours Solihull, Sutton Coldfield, Meriden, Aldridge, Bromsgrove and Halesowen, have increased collectively to the extent of over 62,000.

That it is the wealthier residents who tend to move to adjoining residential areas seems to be shown by the fact that the average rateable value of dwelling houses in the City is considerably lower than in adjoining areas, and, while domestic rateable value in Birmingham and its neighbours is increasing, Birmingham's increase is only in the £11—£30 rateable value group whereas, in Solihull and Sutton Coldfield, not only is the percentage increase concentrated in the higher £31—£50 rateable value group, but absolute increases are also taking place in the £11—£30 and the over £50 groups. It is claimed that many of the highly-rated dwellings in neighbouring areas arise from the prosperity of Birmingham which is left with an undue proportion of houses of low rateable value.

Live Births

		1955	1956	1957	1958
(a)	Born in the City ...	17,360	18,022	18,472	18,911
(b)	Born outside the City ...	413	456	434	370
TOTALS		17,773	18,478	18,906	19,281

Having reached a post-war peak of 23,935 live births in 1947, there was a gradual fall to 17,773 in 1955, since when the number has again risen each year.

Live Birth Rate. 17·60 per 1,000 population.

This is the highest rate since 1949 when it was 18·1 per 1,000 population.

Stillbirths. There were 433. Of these 246 (56·8%) were premature births.

Stillbirth Rate per 1,000 total (live and still) births 21·96. On three occasions the rate has been lower. The lowest rate was 19·6, recorded in 1952.

<i>Year</i>	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
<i>Rate</i>	21·8	21·7	23·0	22·2	19·6	23·5	21·6	23·0	23·0	21·5	22·0

Total Births (live and still) 19,714.

Infant Deaths under 1 year of age.

Legitimate, 434 ; Illegitimate, 49. Total 483.

Infant Mortality Rate

per 1,000 live births	25·05
per 1,000 legitimate births	24·07
per 1,000 illegitimate births	39·29

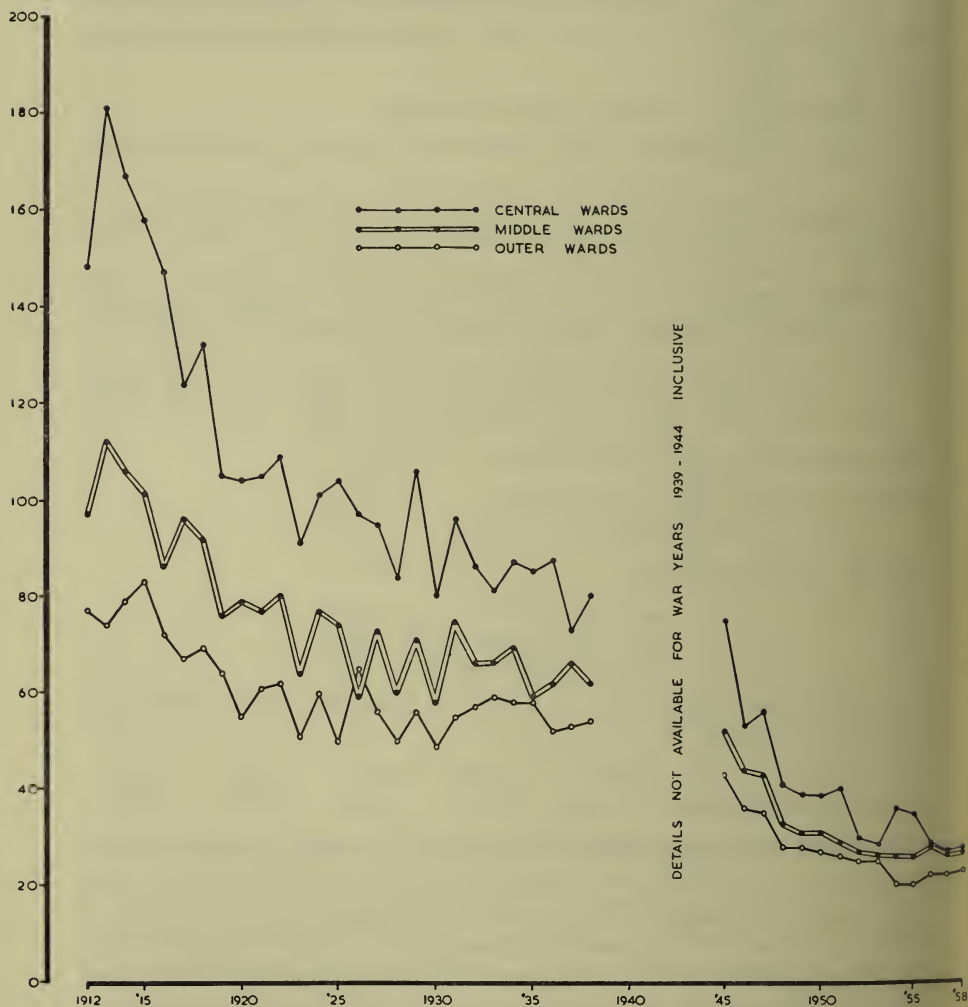
The lowest rate recorded was 23·7 per 1,000 live births in 1955 since when the rate has risen.

	1954	1955	1956	1957	1958
Infant Mortality Rate	24·2	23·7	24·6	24·6	25·05

Neo-natal Mortality Rate, measured as the deaths in the first four weeks of life per 1,000 live births, is much more an index of maternal health and the hazards of the process of birth than it is of the standard of infant care and environmental circumstances. The rate for 1958 was 17·94 per 1,000 live births, there being 297 deaths of legitimate babies and 49 of illegitimate giving a legitimate rate of 15·53 and an illegitimate rate of 23·26.

Post Neo-natal Mortality Rate was 7·1 deaths in the first year per 1,000 live births, deaths in the first four weeks being excluded. The components were a rate of 6·7 for legitimate babies and the very high rate of 13·6 for illegitimate babies. Environment and standard of child care are important factors in this rate.

INFANT MORTALITY RATES IN GROUPS OF WARDS.



Early Neo-natal Mortality Rate was 16·0. These deaths in the first week of life per 1,000 births are, even more closely than deaths in the first four weeks, a reflection of maternal health and birth hazards. The total of 309 deaths was comprised of 280 legitimate and 29 illegitimate children giving rates of 15·2 and 23·3 respectively, and a total rate of 16·02.

Perinatal Mortality Rate (stillbirths plus deaths during the first week) per 1,000 total live and still births was 37·8. This has shown a distinctly adverse trend since the record low level of 35·1 was attained in 1954. Deaths numbered 746 in 1958.

Percentage of Illegitimate Live Births

Number was 1,247, being 6·5% of total live births.

Whilst there is close similarity between the figures for legitimate births compiled locally and those published by the Registrar General, the figures for illegitimate births tend to be at least 5% below the Registrar's figures and, for 1958, were actually 6·73% below. This may be because a number of Birmingham women having illegitimate babies go outside the City for confinement and these births are not recorded in our figures. The following percentages are locally recorded illegitimate live babies compared with total live births.

<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>	<i>1957</i>	<i>1958</i>
5·1%	4·7%	4·8%	5·1%	5·2%	5·3%	6·2%	6·4%	6·5%

In 1945 there were 1,841 illegitimate births but the number declined steadily until 1951 since when the problem has increased year by year.

The table on page 58 shows how, at various periods in the first year of life, the mortality rates for illegitimate infants are consistently higher than for legitimate, the rate for the former being shown also as a percentage of the latter.

Unfortunately a reliable comparison of stillbirth rates is not possible as the fact of a stillbirth being illegitimate often is not recorded.

These figures and the ones in the table on page 62 demonstrate how, in general, the mortality rates over a long period of years had been steadily falling until four years ago since when there has been a rise. The rise in illegitimacy with its associated higher death rates is one causal factor but deaths in the first four weeks of life, even among legitimate infants, have been so much more prevalent as to influence adversely the infant mortality rate for the whole of the first year of life in spite of the steady improvement of the post neo-natal mortality rate for legitimate infants having continued to date.

MORTALITY RATES OF LEGITIMATE AND ILLEGITIMATE BABIES

	<i>Stillbirth Rate</i>	<i>Early Neo-natal mortality rate</i>	<i>Perinatal mortality rate</i>	<i>4 weeks Neo-natal mortality rate</i>	<i>Post Neo-natal mortality rate</i>	<i>Total Infant mortality rate</i>
1958 Legitimate	21.96	15.2	37.8	17.4	6.7	24.1
Illegitimate	...	23.3	...	25.6	13.6	39.3
Total ...	...	16.02	...	17.9	7.1	25.1
1957 Legitimate	21.53	15.3	36.95	17.2	6.8	24.0
Illegitimate	...	22.3	...	24.8	9.1	33.8
Total ...	...	15.8	...	17.7	7.0	24.7
1956 Legitimate	22.94	14.1	37.5	16.5	6.8	23.8
Illegitimate	...	26.2	...	28.9	8.7	37.6
Total ...	...	14.8	...	17.6	7.0	24.6
1955 Legitimate	23.0	12.2	35.7	15.5	7.5	22.9
Illegitimate	...	26.8	...	30.7	7.4	38.1
Total ...	...	13.0	...	16.3	7.5	23.7
1954 Legitimate	21.6	13.6	35.1	16.6	7.1	23.7
Illegitimate	...	16.8	...	19.9	13.6	33.5
Total ...	...	13.8	...	16.8	7.4	24.2

Comparing Birmingham's experience of infant mortality with that of the whole country, the national stillbirth rate has remained more or less static, as has our own, for a few years, but Birmingham figures are rather more favourable. The difficult hard core of the problem has evidently been reached and the Health Department during the year participated in a detailed programme of research organised on a national scale.

The national infant mortality rate is continuing to decline as compared with the year by year rise in Birmingham since the low record of 22.9 in 1955. Birmingham's figure of 25.1 for 1958 compares unfavourably with the provisional national one of 22.6.

Maternal Deaths (excluding abortion) numbered six. The numbers in previous years were :—

1957	1956	1955	1954	1953	1952	1951	1950
9	9	5	11	11	11	12	14

Maternal Mortality Rate (including two deaths after abortion) per 1,000 total births—0.41.

Death Rate from all causes was 11.02 per thousand of population. The lowest death rate recorded was 9.8 in 1948. On twelve occasions the year's death rate has been lower than the present, the first occasion being as long ago as 1923. A small rise in the death rate must now be expected as the population comes to contain an increasing proportion of elderly people who are a group subject to high rates which modern preventative and curative medicine have not improved. Those fatal conditions to which the elderly are specially prone—senility, arteriosclerosis, heart and circulatory disease, cerebral haemorrhage, pneumonia, bronchitis and cancer—were collectively responsible for 85% of all deaths and, in this large group of deaths, 70% of the victims were aged 65 years and over.

Considering deaths from each of these diseases separately, the following percentages indicate the proportion of victims aged 65 years and over.

Heart Disease	75.9%	Pneumonia, Bronchitis	
Cancer	53.2%	and Influenza... ..	68.4%
Cerebral Haemorrhage ...	81.8%	Arteriosclerosis and	
Senility	99.3%	circulatory disease ...	76.3%
		Violence	51.5%

In the past nine years these diseases plus suicide, accounted for the following deaths at all ages :—

	<i>Heart disease</i>	<i>Cancer</i>	<i>Cerebral haemorrhage</i>	<i>Pneumonia Bronchitis Influenza</i>	<i>Arterio- sclerosis and Circulatory disease</i>	<i>Senility</i>	<i>Violence and Suicide</i>
1950	3,599	2,106	1,429	1,409	455	246	460
1951	3,876	2,021	1,529	1,905	287	248	499
1952	3,403	2,130	1,504	1,196	412	270	468
1953	3,379	2,237	1,567	1,525	395	380	451
1954	3,384	2,295	1,710	1,234	427	441	452
1955	3,630	2,295	1,755	1,442	418	658	527
1956	3,322	2,315	1,628	1,402	463	592	544
1957	3,452	2,428	1,565	1,509	677	377	554
1958	3,584	2,309	1,763	1,422	465	145	545
% of all deaths in 1958	29.69	19.13	14.65	11.78	3.86	1.20	4.51

The sudden fall in deaths regarded as due to senility is caused by a local change in coding procedure in which greater attention is paid to heart and circulatory conditions even though the patient is also stated to be senile. The numbers recorded as dying from heart and circulatory conditions have increased correspondingly.

After a progressive rise since 1951 in deaths from cancer, the total deaths in 1958 were 119 fewer than in 1957. Slightly fewer deaths from cancer of the lung and bronchus, stomach and breast and fewer deaths from leukaemia contributed to this more favourable situation.

Deaths in the group " pneumonia, bronchitis, influenza," fell to a more normal level of 1,422, as deaths from influenza totalled only 39, as compared with 153, 38 and 83 in each of the previous three years. Deaths from bronchitis and pneumonia have remained very constant in number in each of the past four years, the abnormal distribution during 1957 not being repeated in 1958 but the high death rate at the end of 1957 did continue into the early part of the following year.

DEATHS FROM BRONCHITIS AND PNEUMONIA

	<i>First Quarter</i>	<i>Second Quarter</i>	<i>Third Quarter</i>	<i>Fourth Quarter</i>	<i>Total</i>
1955	640	258	128	333	1,359
1956	588	269	160	347	1,364
1957	337	262	152	604	1,355
1958	633	266	144	340	1,383

Area Comparability Factors

Births 0.95 Deaths 1.10.

Death rates among males are higher than among females at all ages and the very young and the old die more readily than those in their prime. The death rate of a locality therefore depends not only upon the healthiness of its environment but also upon the age and sex compositions of its population. For comparison of death rates of one locality with another and with the country as a whole, it is therefore necessary to eliminate the age and sex element and this is done by multiplying the crude death rate by a "comparability factor." The Birmingham death rate "comparability factor" of 1.10, being greater than one, indicates that the sex and age composition of the population in itself tends to produce a low crude death rate.

For the purpose of comparison the Adjusted Birth Rate is 16.73 and the Adjusted Death Rate is 12.13. Comparability factors should be borne in mind when studying the table of Crude Rates on page 62.

AGES AT DEATH FROM LEUKAEMIA

					<i>0—14 yrs.</i>	<i>15—24 yrs.</i>	<i>25 yrs.+</i>
1940	...	...	...	...	7	—	19
1941	...	...	...	...	5	2	14
1942	...	...	...	...	4	2	21
1943	...	...	...	...	6	1	19
1944	...	...	...	...	5	3	21
1945	...	...	...	...	4	2	20
1946	...	...	...	...	9	3	36
1947	...	...	...	...	7	—	21
1948	...	...	...	...	7	3	18
1949	...	...	...	...	7	5	31
1950	...	...	...	...	6	—	36
1951	...	...	...	...	11	1	28
1952	...	...	...	...	7	5	34
1953	...	...	...	...	7	2	43
1954	...	...	...	...	10	5	32
1955	...	...	...	...	7	3	38
1956	...	...	...	...	8	5	42
1957	...	...	...	...	8	3	49
1958	...	...	...	...	6	1	35

CRUDE RATES

Year	BIRTH RATE *			STILLBIRTH RATE per 1,000 total births			INFANT MORT. RATE			DEATH RATE *		
	B'ham	Great Towns	Eng. and Wales	B'ham	Great Towns	Eng. and Wales	B'ham	Great Towns	Eng. and Wales	B'ham	Great Towns	Eng. and Wales
1901	31.4		27.2 <i>is mean for 1901— 1910</i>	—	—	—	176		151	17.5		16.6
1911	26.1		24.4	—	—	—	150		130	15.0		14.6
1921	24.1		22.4	35			83		83	11.3		12.1
1931	16.9		15.8	39		41	71		66	11.7		12.8
1936	15.8		14.8	35		40	62		59	11.3		12.1
1941	16.8	14.7	13.9	29		35	69	71	60	13.2	14.9	13.8
1942	19.3	17.3	15.6	28		33	56	59	51	11.8	13.3	12.8
1943	20.9	18.6	16.2	27		30	55	58	49	12.1	14.2	13.0
1944	22.8	20.3	17.7	25		28	42	52	45	11.3	13.7	12.7
1945	20.2	19.1	15.9	25		28	49	54	46	11.2	13.5	12.6
1946	22.5	22.2	19.2	25		27	40	46	43	11.3	12.7	12.4
1947	22.2	23.3	20.5	24		24	41	47	41	11.1	13.0	12.8
1948	19.5	20.0	17.9	22		23	32	39	34	9.8	11.6	11.0
1949	18.1	18.7	16.9	22		23	31	37	32	10.7	12.5	11.8
1950	16.8	17.6	15.8	23		23	30	34	30	10.9	12.3	11.6
1951	16.5	17.3	15.5	22		23	30	34	30	11.4	13.4	12.4
1952	16.4	16.9	15.3	20	25	23	27	31	28	10.2	12.1	11.8
1953	16.6	17.0	15.5	23	25	22	26	31	27	10.6	12.2	11.4
1954	16.4	15.2	15.2	22	23	24	24	25	25	10.6	11.1	11.8
1955	16.0	14.9	15.0	23	23	23	24	25	25	11.3	11.6	11.7
1956	16.6	15.6	15.6	23	23	23	25	24	24	10.9	11.6	11.7
1957	17.1	16.1	16.1	22	23	22	25	24	23	11.2	11.5	11.8
1958	17.6		16.4	22		22	25		23	11.0		11.7

* As from January, 1952, there are 160 County Boroughs and Great Towns, including London, instead of the 126 previously referred to.

Cause of Death										Age									
No.										75-									
Sex										65-									
U										45-									
2-										25-									
1-										5-									
14A										14B									
15										15A									
16										16A									
17										17A									
18										18A									
19										19A									
20										20A									
21										21A									
22										22A									
23										23A									
24										24A									
25										25A									
26										26A									
27										27A									
28										28A									
29										29A									
30										30A									
31										31A									
32										32A									
33										33A									
34										34A									
35										35A									
All Causes										All Causes									

BIRTH, DEATH AND INFANT MORTALITY RATES IN WARDS, 1958

	WARDS	Estimated Population	BIRTHS		TOTAL DEATHS		INFANT DEATHS	
			Number	Rate per 1,000 population	Number	Rate per 1,000 population	Number	Rate per 1,000 births
CENTRAL	St. Paul's	21,300	496	23.3	234	11.0	15	30
	Duddeston	25,000	614	24.6	280	11.2	17	28
	Deritend	20,100	503	25.0	209	10.4	13	26
	Market Hall	19,800	595	30.1	227	11.5	15	24
	Ladywood	19,900	496	24.9	210	10.6	16	32
	Totals and Average Rates of Central Wards	106,100	2,704	25.4	1,160	10.9	76	28
MIDDLE RING	Lozells	30,200	732	24.2	375	12.4	19	26
	Aston	26,700	559	20.9	296	11.1	17	30
	Gravelly Hill	27,000	533	19.7	338	12.5	19	30
	Washwood Heath	34,900	527	15.1	338	9.7	14	24
	Saltley	29,500	519	17.6	333	11.3	12	24
	Small Heath	28,700	594	20.7	315	11.0	16	24
	Sparkbrook	23,700	648	27.3	259	10.9	22	34
	Balsall Heath	24,000	567	23.6	319	13.3	6	14
	Edgbaston	24,500	364	14.9	339	13.8	5	14
	Rotton Park	22,400	459	20.5	659	29.4	17	36
	All Saints	23,800	405	17.0	363	15.3	11	27
	Soho	23,700	564	23.8	291	12.3	19	34
	Totals and Average Rates of Middle Ring Wards	319,100	6,471	20.3	4,225	13.2	177	27
OUTER RING	Stechford	50,800	742	14.6	415	8.2	20	27
	Sheldon	45,900	726	15.8	243	5.3	20	28
	Yardley	24,500	348	14.2	256	10.4	11	32
	Acoccks Green	20,500	305	14.9	227	11.1	6	20
	Fox Hollies	21,400	242	11.3	260	12.1	6	24
	Sparkhill	24,500	499	20.4	281	11.5	13	26
	Hall Green	24,900	255	10.2	277	11.1	5	20
	Springfield	25,800	325	12.6	273	10.6	7	22
	Brandwood	36,700	499	13.6	335	9.1	7	14
	Moseley and Kings Heath	28,800	573	20.1	374	13.1	16	22
	Selly Oak	29,900	393	13.1	459	15.4	7	14
	King's Norton	29,800	456	15.3	315	10.6	11	22
	Northfield	48,100	778	16.2	438	9.1	16	24
	Weoley	38,800	593	15.3	233	6.0	10	14
	Harborne	35,200	427	12.1	423	12.0	7	16
	Sandwell	25,300	430	17.0	276	10.9	14	30
	Handsworth	24,900	605	24.3	348	14.0	13	24
	Perry Barr	36,700	486	13.2	215	5.9	7	14
	Kingstanding	37,200	593	15.9	259	7.0	11	19
	Stockland Green	29,800	403	13.5	414	13.9	8	20
	Erdington	30,600	423	13.8	349	11.4	12	24
	Totals and Average Rates of Outer Ring Wards	669,800	10,101	15.1	6,670	10.0	227	24
	Ward of Domicile not known	—	5	—	18	—	3	—
	Totals and Average Rates for Whole City	1,095,000	19,281	17.6	12,073	11.0	483	24

YEAR	Population Estimated to mid- of each year	Birth-rate	Death-rate	Infant Mortality		Early Neonatal (first week)	Neonatal (first month)	Post-neonatal (1—12 months)	Congenital Death, Premature Birth, Malformations, etc. (under 1)	Diarrhoea and Enteritis (under 1)	Stillbirths	Perinatal (including abortions)	Influenza	Tuberculosis		Cancer	Diseases of Nervous System	Diseases of Circulatory System	Respiratory System	Diseases of Digestive System	Diseases of Genito- Urinary System	Suicides	Other Violence
				Deaths	Births									Respiratory	Other Forms								
1921	919,683	24.1	11.3	83	21.2	35.0	48.0	36.6	16.6	35.1	55.5	2.74	.15	.97	.16	1.12	0.98	1.64	2.02	93	.38	.10	.26
1922	927,844	21.5	12.1	86	23.0	34.4	51.5	37.4	8.5	32.6	55.1	2.92	.48	.97	.16	1.18	1.04	1.85	2.38	.66	.37	.12	.26
1923	935,079	20.4	11.6	72	19.8	31.1	40.3	31.3	10.9	31.9	51.1	2.92	.28	.92	.16	1.17	1.00	1.71	1.98	.70	.39	.14	.35
1924	944,386	19.2	11.0	83	22.8	34.6	47.9	37.2	9.2	28.7	50.9	3.80	.39	.97	.13	1.30	1.00	1.91	2.15	.70	.37	.10	.31
1925	952,766	18.8	11.5	78	21.4	32.5	46.8	35.3	11.3	28.0	53.6	4.01	.39	.98	.13	1.27	0.98	2.12	1.97	.73	.37	.11	.33
Average	966,252	20.8	11.7	80	21.6	33.1	48.0	36.0	11.2	31.6	53.2	4.07	.34	.96	.12	1.21	1.00	1.85	2.10	.74	.38	.11	.30
1926	961,222	18.7	11.8	73	20.6	33.3	49.0	35.1	11.5	29.3	52.2	3.48	.27	.94	.15	1.26	1.07	2.12	1.88	.73	.40	.12	.32
1927	969,750	17.6	10.9	65	21.2	31.5	37.4	31.6	9.3	33.4	53.8	3.70	.13	.86	.17	1.36	0.95	2.28	1.89	.70	.41	.15	.36
1928	975,500	17.6	10.9	69	23.9	32.3	46.5	35.4	13.9	33.9	57.0	3.85	.70	.86	.13	1.35	0.94	2.41	1.56	.67	.48	.16	.40
1929	981,000	17.7	10.8	70	20.8	28.7	31.4	30.6	7.6	38.0	58.0	3.25	.13	.90	.15	1.34	0.98	2.76	2.26	.76	.53	.16	.42
1930	982,000	17.7	10.8	69	20.8	28.7	31.4	30.6	10.7	33.2	54.4	3.65	.41	.91	.13	1.43	0.88	2.57	1.32	.60	.44	.15	.40
Average	1,011,500	17.8	11.6	70	21.9	31.4	39.8	33.0	8.7	39.3	63.6	3.66	.27	.92	.14	1.35	0.96	2.43	1.78	.69	.45	.16	.38
1931	1,011,500	16.9	11.7	67	24.7	29.8	35.1	34.6	7.7	37.8	59.5	3.60	.36	.84	.10	1.46	0.77	2.90	1.61	.62	.45	.15	.35
1932	1,017,500	16.3	11.3	66	24.8	32.7	34.7	33.6	7.8	37.8	59.5	3.57	.44	.85	.11	1.43	0.87	2.73	1.47	.59	.45	.19	.35
1933	1,023,500	14.7	11.0	64	25.8	32.6	35.1	35.0	8.7	35.7	60.6	3.68	.18	.71	.08	1.43	0.76	3.04	1.26	.67	.44	.16	.38
1934	1,028,000	15.3	11.0	64	24.9	33.4	30.9	36.3	7.7	33.3	57.4	3.40	.15	.71	.08	1.52	0.72	3.14	1.09	.62	.46	.13	.40
1935	1,033,000	15.4	10.9	64	24.9	33.4	30.9	36.3	8.1	36.2	60.0	3.58	.28	.80	.10	1.46	0.76	2.95	1.35	.62	.44	.16	.38
Average	1,038,500	15.8	11.2	67	24.7	29.8	35.1	34.6	5.4	34.8	58.0	3.53	.13	.71	.07	1.57	0.69	3.40	1.22	.62	.45	.12	.38
1936	1,038,500	15.8	11.3	67	24.7	29.8	35.1	34.6	5.4	34.8	58.0	3.53	.13	.71	.07	1.57	0.69	3.40	1.22	.62	.45	.12	.38
1937	1,043,000	16.3	11.7	60	24.3	31.0	28.9	33.1	5.1	34.6	58.1	2.95	.40	.72	.08	1.62	0.73	3.40	1.40	.56	.45	.15	.39
1938	1,048,000	16.6	10.9	61	21.0	26.7	34.5	28.5	12.5	34.7	41.3	2.71	.15	.70	.08	1.59	0.61	3.45	1.18	.61	.43	.16	.34
1939	1,055,000	16.6	11.4	60	20.7	26.8	32.8	29.1	13.7	36.0	56.0	2.48	.18	.77	.07	1.55	0.67	3.65	1.16	.45	.39	.15	.36
1940	1,020,000	16.9	14.3	60	19.6	26.8	41.2	28.2	12.1	32.8	51.7	2.21	.22	.77	.07	1.63	0.31	3.31	2.21	.55	.46	.14	.42
Average	1,050,000	16.4	11.9	63	21.9	28.5	34.0	30.3	9.8	34.6	53.0	2.77	.21	.73	.07	1.59	0.80	3.45	1.43	.58	.44	.14	.38
1941	950,000	16.8	13.2	56	20.5	29.1	39.9	26.4	11.3	29.1	49.0	2.49	.15	.81	.09	1.70	1.30	3.10	1.94	.72	.45	.12	.44
1942	965,000	19.3	11.8	55	20.2	30.7	25.9	29.4	9.8	28.4	48.0	2.34	.10	.77	.09	1.77	1.28	2.87	1.51	.64	.43	.11	.37
1943	965,000	20.9	12.1	56	17.9	25.1	29.3	23.4	8.1	27.4	44.8	1.69	.34	.71	.07	1.83	1.34	3.02	1.73	.46	.45	.11	.31
1944	990,000	22.8	11.9	42	15.4	22.5	19.8	21.7	7.8	24.5	39.6	1.34	.11	.70	.09	1.75	1.29	3.15	1.40	.43	.42	.08	.32
1945	990,000	19.9	11.2	42	15.4	22.5	19.8	21.7	7.8	24.5	39.6	1.34	.11	.70	.09	1.75	1.29	3.15	1.40	.43	.42	.08	.32
Average	1,017,100	19.9	11.9	54	18.2	25.9	28.3	25.0	8.8	26.8	44.5	1.85	.15	.73	.08	1.78	1.31	3.10	1.80	.54	.43	.10	.34
1946	1,017,100	22.5	11.3	40	17.3	22.1	17.9	20.9	6.1	25.6	42.2	0.98	.08	.68	.07	1.84	1.33	3.14	1.44	.44	.41	.10	.27
1947	1,076,300	19.5	8.8	32	16.3	18.0	13.6	17.8	3.2	21.8	37.7	0.50	.03	.59	.04	1.82	1.10	3.00	1.10	.32	.33	.13	.27
1948	1,068,100	18.1	10.7	31	15.0	17.7	13.1	18.3	3.2	21.7	30.4	0.49	.19	.54	.05	1.75	1.25	3.52	1.34	.35	.29	.12	.27
1949	1,106,800	18.1	10.7	30	8.0	19.2	10.9	18.9	2.2	23.0	30.8	0.83	.07	.43	.03	1.88	1.40	3.67	1.30	.35	.28	.12	.30
1950	1,117,900	16.8	10.9	35	14.5	15.1	15.1	19.3	4.4	23.2	36.0	0.73	.10	.56	.05	1.84	1.28	3.38	1.32	.38	.32	.12	.28
Average	1,110,900	16.5	11.4	37	15.9	19.2	10.5	18.2	1.6	22.2	37.6	0.75	.26	.35	.03	1.82	1.49	3.79	1.54	.42	.25	.12	.33
1951	1,119,000	16.4	10.2	30	15.6	17.6	9.2	17.5	1.3	19.6	33.3	0.80	.03	.25	.02	1.90	1.46	3.46	1.12	.39	.22	.11	.31
1952	1,119,000	16.4	10.2	27	15.6	17.6	9.2	17.5	1.3	19.6	33.3	0.80	.03	.25	.02	1.90	1.46	3.46	1.12	.39	.22	.11	.31
1953	1,118,500	16.4	10.6	26	15.1	18.0	8.1	18.0	0.7	23.5	37.9	0.58	.15	.24	.01	2.00	1.51	3.40	1.29	.36	.24	.12	.28
1954	1,117,700	16.4	10.6	24	13.8	16.8	7.4	16.5	1.1	21.6	35.1	0.80	.03	.20	.01	2.05	1.64	3.44	1.15	.40	.25	.13	.27
1955	1,111,700	16.4	10.3	24	13.0	16.3	7.4	17.2	0.8	23.0	35.3	0.32	.08	.19	.01	2.05	1.68	3.67	1.28	.39	.20	.12	.36
Average	1,110,800	16.6	10.4	26	14.7	17.6	8.5	17.5	1.1	22.0	35.3	0.65	.11	.25	.02	1.97	1.56	3.55	1.28	.39	.23	.12	.31
1956	1,110,800	16.6	10.4	25	14.8	17.6	7.0	17.9	0.3	21.9	37.4	0.63	.03	.14	.01	2.08	1.55	3.46	1.29	.38	.21	.13	.37
1957	1,103,000	17.1	11.2	25	15.8	17.7	7.0	18.5	0.7	23.5	37.0	0.41	.14	.12	.01	2.20	1.54	3.73	1.31	.37	.23	.14	.36
1958	1,095,000	17.6	11.0	25	16.0	17.9	7.1	20.0	0.4	22.0	37.8	0.40	.04	.13	.01	2.10	1.75	3.78	1.34	.35	.19	.13	.37

*Exclusive of General Paralysis
†Registrar General's Estimate

EPIDEMIOLOGY

In every field of the Department's work collaboration with other sections of the Health and Social Services is of the utmost importance. This is certainly true of epidemiology in which the expeditious passing of information, compiling of records and taking urgent preventive action is made possible through every assistance being given by general practitioners, hospitals and by the Public Health Laboratory Service.

Bronchiolitis

During the first 2½ months of 1958, some general practitioners and hospitals were experiencing a severe upper respiratory infection amongst very young babies. The usual history was that the child became infected by an adult or school child in the family suffering from what appeared to be a very mild cold indeed with slight cough. The baby at first did not appear unduly ill and then quite suddenly became breathless and distressed. Some very small babies were in oxygen tents with high concentrations of oxygen. This appeared to be life saving—antibiotics being virtually ineffective. Admissions to hospitals were very high and nearly all the children were aged less than one year.

The position improved at the beginning of March and admissions to hospitals were much fewer. Many other areas of the country had a similar experience to Birmingham. A few deaths occurred.

Where possible throat swabs, faecal specimens and, in the case of adults, paired blood specimens were taken from members of the household where a baby had been admitted to hospital suffering from this upper respiratory condition. Only in one case was a positive result obtained—influenza "A" virus of the Asian variety being isolated from a sibling of a patient.

No further outbreak arose during the remainder of the year. The cause remained unknown but was likely to have been a virus.

Diphtheria

The year 1958 is outstanding for the fact that not a single case of diphtheria occurred in Birmingham. The 28 patients notified as suffering from this disease were all found to be affected by other conditions.

Since 1953 there have been the following numbers of confirmed cases of diphtheria in Birmingham :—

<i>Year</i>	<i>Cases</i>	<i>Deaths</i>	<i>Immunisation History</i>
1953	1	0	Never immunised
1954	3	0	Never immunised
1955	4	2	3 never immunised 1 (mild case) overdue for reinforcing injection
1956	1	0	Never immunised
1957	1	1	Never immunised
1958	0	0	

These results are a triumph for preventive medicine and clearly illustrate the need for every child to continue to be protected.

Immunisation—see Immunisation Section (Page 82).

Dysentery

The number of cases of dysentery recorded in 1958 was slightly lower than in 1957. During the last six years there were the following cases.

<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>	<i>1957</i>	<i>1958</i>
359	621	514	1,258	584	562

As usual the greatest number arose in the first quarter :—

<i>1st quarter</i>	<i>2nd quarter</i>	<i>3rd quarter</i>	<i>4th quarter</i>
209	118	136	99

The age and sex distribution remains much the same as before, children under ten years being especially liable to fall victims.

<i>Age</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5-9</i>	<i>10-14</i>	<i>15-19</i>	<i>20-24</i>	<i>25-34</i>	<i>35-44</i>	<i>45-54</i>	<i>55-64</i>	<i>65-74</i>	<i>75+</i>	<i>Total</i>
<i>Sex</i>																
<i>M.</i>	20	27	22	18	16	56	19	8	4	21	14	4	10	4	3	246
<i>F.</i>	10	24	19	24	15	69	11	15	17	41	32	11	7	6	15	316
<i>TOTAL</i>	30	51	41	42	31	125	30	23	21	62	46	15	17	10	18	562

Some 350 cases occurred in children under 15 years. This represents 62·3% of all cases investigated. Amongst the adults the illness is most common in women aged 25 to 44, possibly due to the close association between mothers and young children who are affected.

Two causative organisms were isolated during the year—the remaining cases either not being confirmed or not being examined bacteriologically.

Shigella sonnei	...	...	192 cases
„ flexner	...	...	11 cases

In addition, in four instances, *E. coli* of various pathogenic types was isolated from young children when *Shigella sonnei* was isolated from specimens submitted by adults in the same household.

Particular attention was paid to affected food handlers and their contacts. So far as could be traced, no cases arose during 1958 from transmission of infection in food prepared or handled by these patients and no patient was known to have been infected by food.

There were 11 cases of Flexner dysentery. The varieties of *Shigella flexner* isolated were as follows :—

Shigella flexner	Variant X	...	...	...	8
„	„	Type 3	...	...	1
„	„	„ 1 Sub-type 1b.	...	...	2

On two occasions Flexner Type 1 Sub-type 1b. was isolated from cases which occurred in households which were predominantly Pakistani. The Type 3 organism was isolated from a child who was in contact with a family which had recently returned from Malta. From another member of this family *Shigella flexner* Variant X was isolated. The standard of cleanliness of these households was poor.

A small outbreak of Flexner dysentery due to *Shigella flexner* Variant X occurred during the late summer and autumn in the Ladywood Area. There was a total of seven cases from six families. Six of the cases from five families came from one street and in this same street lived the married daughter of the sixth family affected who lived two streets away. Of the ten members of this sixth household, five were affected with vomiting and diarrhoea, between the 23rd September and the 10th October. Three separate organisms were isolated from three individuals in the family—*Shigella flexner* Variant X., *Shigella sonnei*., and *Salmonella heidelberg*—all the other specimens being bacteriologically negative.

One case of Flexner dysentery was discovered in the area where a large outbreak due to *Shigella flexner* Variant X arose in 1956—1957.

During the year, there were five institutional outbreaks of *Sonnei* dysentery affecting a large hospital for the aged and chronic sick, a large general hospital, a residential home for children, a five-day residential nursery and one day nursery. These institutional outbreaks

illustrated the very great difficulty of controlling the spread of this infection when a large number of people share a communal life.

Encephalitis

(a) In thirteen patients a confirmed diagnosis of infective encephalitis, presumably of virus origin, was made. Of these, six males died at the following ages.

5 mths., 5 mths., 15 yrs., 34 yrs., 45 yrs., 47 yrs.

Three males and four females recovered. Their ages were as follows :—

<i>Males</i>	13 yrs.,	23 yrs.,	25 yrs.
<i>Females</i>	1 yr.,	3½ yrs.,	5 yrs., 11 yrs.

(b) Post infectious encephalitis is usually a secondary attack upon the brain by the same organism as has already caused an illness such as measles and, during 1958, this occurred in two cases. Their sex, age and outcome was as follows :—

<i>Age and Sex</i>	<i>Initial Infection</i>	<i>Outcome</i>
4 yrs. 11 mths. Male	Chickenpox	Recovered
24 yrs. Male	Influenza	Died

Food Poisoning

In 1958 there was an increase over the previous year in the number of so called food poisoning cases notified or ascertained—i.e., 346 as compared with 237 in 1957.

		<i>1st quarter</i>	<i>2nd quarter</i>	<i>3rd quarter</i>	<i>4th quarter</i>	<i>Total</i>
1955	...	79	225	124	251	679
1956	...	61	56	116	121	354
1957	...	70	64	65	38	237
1958	...	17	115	165	49	346

The second and third quarters of 1958 had the heaviest incidence but 130 of the 165 cases occurring in the third quarter were associated in a single outbreak.

The following is a summary of the outbreaks and single cases which occurred, an outbreak being defined as the whole of the cases either probably or certainly derived from a single contaminating or infecting source.

Outbreaks due to Identified Agents.

Total outbreaks ...	6	Total Cases ...	88
Outbreaks due to :		<i>Outbreaks</i>	<i>Cases</i>
(a) Salmonella heidelberg	1 (family)	...	2
(b) Staphylococci (including toxin)	4 (2 family, 2 others)		83
(c) Other bacteria	1 (family)	...	3

Outbreaks of undiscovered cause

Total outbreaks ...	15 (14 in families)	Total Cases ...	168
---------------------	---------------------	-----------------	-----

Single Cases

Agent identified	45	Unknown	45	Total Cases	90
<i>Organism</i>		<i>No. of Cases</i>			
Salmonella typhimurium		16			
„ enteritidis		5			
„ reading		1			
„ heidelberg		10			
„ thompson		2			
„ bredeney		1			
„ st. paul		3			
„ bovis morbificans		1			
„ cholerae suis		1			
Staphylococci (including toxin)		4			
Cl. welchii		1			

OUTBREAKS

Twenty-one outbreaks accounted for a total of 256 cases, the agent being identified in six outbreaks which accounted for 88 cases.

Salmonella heidelberg caused the illnesses of two boys aged 1 and 2 years, which began on 26th and 27th December.

Three members of a family were taken ill on 28.7.58 and staphylococcus pyogenes was isolated from the faeces of only one of them. Corned meat may have been the cause, as culture of the remains gave a growth of staphylococcus pyogenes. Staphylococci were also thought to have caused the illness of two members of a family of five. Chawls bought and prepared at home and eaten the same day was strongly suspected.

Staphylococcal toxin was the cause of an illness in 16 persons who, 2—4 hours after ingestion of a canteen meal, became ill. Swabs from the hands of the cook gave a growth of pyogenic staphylococci. A sausage and onion pie prepared and then re-heated on the following day was presumed to have been infected by the cook.

Chicken and brisket which was suspected as having been contaminated by the chef during preparation, carving and handling, was possibly the cause of the illness amongst 62 people out of 85 at risk who partook of a canteen meal. Staphylococcus pyogenes was isolated from a wound on the chef's finger which was inadequately covered with a

prepared dressing, and also from his nose, but only staphylococcus saprophyticus was isolated from the remains of the chicken and brisket.

Doughnuts, which gave a growth of large gram positive bacilli of the *B. subtilis* type, were suspected as being the cause of illness in a family which had eaten them 2—8 hours earlier.

Of 200 persons at risk through eating boiled mutton, 130 people became ill six to twelve hours later. The meat was prepared on the previous day and left to cool uncovered, then reheated. No causal agent was discovered by examining faeces of patients and hand and nose swabs of cooks. The meat also gave negative results.

SINGLE CASES

It was not possible in the 90 single cases notified to find the actual source of infection, although the causal agent was identified in 45 of them. *Salmonella typhimurium* accounted for 16 cases—the addresses of the patients were widely separated and there was no connection that could be detected between them.

There were eight males and eight females and their ages were as follows :—

<i>Males :</i>	1 year	2 years	2 years	2½ years
	5 years	5 years	13 years	58 years
<i>Females :</i>	14 weeks	3 months	3 years	3 years
	5 years	18 years	38 years	52 years

Ten patients, six of whom were adults, were affected with *Salmonella heidelberg* ; they resided in widely separated areas of the City. Their illnesses began on the following dates :

September 2nd (and relapsed on the 10th), 10th, 12th, 19th, 21st, about 26th (2 cases), 27th and the last two became ill on 1st and 10th October.

The five single cases of *Salmonella enteritidis* infection were three females aged 52 years, 35 years, and 3½ years ; and two males aged 30 years and 1½ years, and the onsets of illnesses were January, July and three cases between 14th and 24th September.

Salmonella thompson affected two patients who lived several miles apart. Dates of onset were 26th June and 31st July.

Salmonella st. paul infected three small children, aged 5 months, 2 years, and 3 years. Their homes were widely separated. Onset dates were 15/9/58 and 12/10/58, the third child becoming ill on 17/9/58, probably having been infected in hospital from one of the others.

Influenza

A widespread influenza epidemic having started in August 1957, the panel of nineteen general practitioners in various parts of the City continued to act as "spotters" when suspected cases of influenza arose in their practices.

During the months of January and February 1958, fourteen paired specimens of blood were obtained from patients at an interval of ten to fourteen days and were subjected to complement fixation tests. Throat swabs were also examined and the following table shows the positive results from paired blood specimens and throat swabs.

<i>No. of patients</i>	<i>Serologically positive—</i>	<i>" A " type virus of Asian strain from throat swabs</i>
5	5—Influenza " A "	5
1	Indicated a recent infection with influenza " A " virus	Neg.
1	Indicated a recent infection with adeno virus	Neg.

The impression was gained that, in this late wave of the epidemic, mainly adults were affected.

Ten deaths were ascribed to influenza in the week ending 4th January but thereafter in only two weeks were there as many as four deaths from this disease—in the whole of the last eight months of the year the total only amounted to seven.

In December there were, however, three patients suffering from upper respiratory tract infection referred by the general practitioner "spotters" for virological investigation. Throat swabs from all three of the patients gave negative results but the blood of two indicated a past infection with Influenza Virus " C " and " A " respectively.

Malaria

Six confirmed cases of malaria were received during 1958 and all infections were contracted abroad.

Measles

A total of 4,163 cases of measles were notified. There were no deaths. A minor rise in incidence occurred between mid June and mid August reaching a peak in the week ending 20th July, 1958 when there were 258 cases. The lowest number of nine notifications was recorded during the week ending 15th February, 1958.

The biennial periodicity of measles epidemics was therefore continued. As in 1957, 18,139 cases were notified, it was not unexpected to receive only 4,168 for 1958.

1955 still remains the year of highest incidence so far on record when notifications reached, 24,714. This, however, followed the very small number of notifications (456) which were received in 1954, the lowest number recorded since 1940.

Meningococcal Infection

Out of a total number of 151 notifications 30 were confirmed and six died.

The ages and sexes of the confirmed cases were as follows :—

Males

0—1 year	...	...	...	10 cases,	4 deaths
1½—3 years	...	...	...	6 cases,	no deaths
7 years	...	...	...	2 cases,	no deaths
43 years	...	...	...	1 case,	1 death

Females

0—1 year	...	...	...	2 cases,	no deaths
1½—3 years	...	...	...	4 cases,	1 death
6, 20, 48, 48, 57 years	...	...	...	5 cases	no deaths

Association between cases was sought but not found.

Paratyphoid Fever

There arose during the year 1958 four cases of paratyphoid fever.

A woman aged 57 was on holiday abroad between 25th May and 8th June, 1958, was taken ill on the 16th June and admitted to hospital on the 21st June. The paratyphoid organism isolated from this patient was of the " Taunton " variety. The patient died on 5/8/58 from ulcerative colitis.

On the 23rd July, a girl aged 19 years was notified as suffering from paratyphoid B infection, having been admitted to hospital on the 18th July. Her friend, also aged 19 years was reported to be suffering from the same symptoms and she too was admitted to hospital on the 23rd July. In both cases paratyphoid B, phage type 3A1 was isolated from their stools. Prior to commencing a holiday together the girls had seen nothing of one another for some time. Then one had stayed the night of the 4th July at her friend's house just beyond the City boundary. Lettuce from the garden was eaten for supper and also used the next day in sandwiches eaten whilst travelling. On the night of the 3rd July, 1958, there was a rain storm and the garden where the lettuce was grown was flooded with sewage contaminated water. The source of infection was therefore assumed to be the lettuce. Faecal specimens taken from other members of both families were negative with the exception of one case, the brother of one of the girls. He also had eaten lettuce and admitted that he had had similar symptoms to those of his sister. He was later admitted to hospital from his home outside the City.

The fourth case was of paratyphoid " A " fever and occurred in an Indian aged 40 years who had only been in England a very short while and it was therefore assumed that he had brought the infection with him.

Pneumonia

The Public Health (Infectious Diseases) Regulations, 1953, make notifiable pneumonia only when the disease is primary, or when it occurs as the result of an attack of influenza. There were 477 notifications of primary pneumonia and 148 of the type following influenza.

The age incidence was :—

Age	0—	1—2	3—4	5—9	10—14	15—19	20—24	25—34	35—44	45—54	55—64	65—74	75+	Total
Notifs. of :—														
Primary Pneumonia	22	36	26	42	13	8	12	40	42	62	85	56	33	477
Pneumonia following Influenza	4	8	5	5	4	4	4	14	16	18	32	16	18	148

The monthly incidence is given below.

Month	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Notifs. of :—												
Primary pneumonia	79	102	51	56	23	19	21	10	16	22	32	46
Pneumonia following influenza ...	30	30	15	17	9	1	5	2	4	5	9	21

Broncopneumonia is by far the commonest type of pneumonia and it is not notifiable unless occurring after influenza. Deaths from all types of pneumonia totalled 531, the age distribution being as follows :—

0—	1—	2—	5—	15—	25—	45—	65—	75—	Total
65	4	6	1	4	13	75	119	244	531

68·4% of the deaths were in persons aged 65 years and over, but only 19·4% of notifications related to this group.

Poliomyelitis

Although there were only 62 notifications of poliomyelitis received during 1958, as compared with 112 notifications in 1957, 34 were confirmed. In addition, however, nine were found to be suffering from poliomyelitis who had originally been diagnosed as suffering from :—meningitis (7) ; chickenpox and ? encephalitis (1) ; encephalitis (1). The total of confirmed cases was therefore 43—(37 paralytic and 6 non-paralytic)—as compared with the following numbers in previous years :—

	1953	1954	1955	1956	1957	1958
Paralytic ...	27	11	68	6	25	37
Non-paralytic ...	13	6	16	1	10	6
TOTAL ...	40	17	84	7	35	43

One male and four females died from paralytic poliomyelitis.

In only two pairs of cases was there any connection—(1) Two boys aged 5 years and 2 years (neither vaccinated) who lived in the same road—had close contact with each other. The dates of onset of illness were 26th September and 13th October but the types of virus isolated were Type 1 and Type 2 respectively ; (2) Two brothers infected with Type 1 ; dates of onset 8th—13th November. Both had been vaccinated twice, but one brother's second injection was just a month before his illness. He had severe residual paralysis but the other boy recovered completely.

The following table shows the age distribution.

<i>Age</i>	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+
MALES :								
<i>Paralytic</i>	8	6	1	1	0	1	2	1 Died
<i>Non-paralytic</i>	3	2	1	0	0	0	0	0
FEMALES :								
<i>Paralytic</i>	6	4	1	1	1	2 Both Died	1 Died	1 Died
<i>Non-paralytic</i>	0	0	0	0	0	0	0	0

Seventeen patients were under five years of age and a total of thirty-two were under 15 years of age.

At the beginning of the year 39,010 persons had received two vaccinations against poliomyelitis and by the year end a further 128,915 had completed this treatment. Ten children who had already received the two injections developed the disease but five made a complete recovery having at no time been severely affected ; one was left with a weak knee and one was severely paralysed but only in one leg. Two others remained very severely handicapped by paralysis and one mildly paralysed, but these were the only three in whom vaccination was followed by the illness before there had been sufficient time for a good immunity to develop following vaccination.

The following positive laboratory findings were obtained from poliomyelitis cases :—

	<i>Paralytic</i>		<i>Pos. Blood Agglutinations</i>	<i>Virus isolated from stools</i>
Type 1	4	23
„ 2	—	2
<i>Non-paralytic</i>				
Type 1	—	5

An attempt was made to define the infecting agent in eight of the ten vaccinated children. Positive results were obtained in six cases—all Type I.

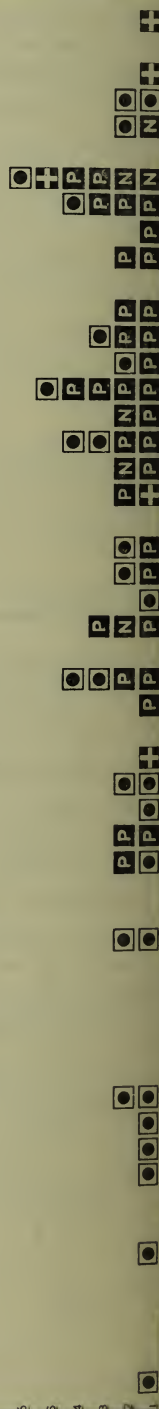
P O L I O M Y E L I T I S 1 9 5 8



LOCATION OF CASES

KEY

- ◻ NOTIFICATION
- N " " NOT CONFIRMED
- P " " CONFIRMED NON PARALYTIC
- +
- DEATH OF CONFIRMED CASE



JAN: FEB: MAR: APR: MAY: JUNE: JULY: AUG: SEPT: OCT: NOV: DEC

PATIENTS

Poliomyelitis Vaccination

See Immunisation Section (Page 87).

Scabies

Some 689 persons reported to the Scabies Clinic, Bacchus Road, for treatment. Of these 304 were adult males and 385 adult women and children. A further 166 school children were treated by the School Health Service following school medical inspections.

The numbers of cases in each of the last seven years were as follows :—

<i>Year</i>	<i>Treated by Health Dept.</i>	<i>School Health Service</i>	<i>Total</i>
1952 ...	438	147	585
1953 ...	423	68	491
1954 ...	328	96	424
1955 ...	382	104	486
1956 ...	496	99	595
1957 ...	540	65	605
1958 ...	689	166	855

Since 1954 there has been a consistent tendency for the numbers of cases coming forward for treatment to increase.

Scarlet Fever

In the year 1958, there were 1,126 notifications received. There was one death, a boy aged 21 months who died from 1 (a) lung abcess, (b) scarlet fever, (c) renal failure.

The age and sex distribution was as follows :—

	<i>0—</i>	<i>1—2</i>	<i>3—4</i>	<i>5—9</i>	<i>10—14</i>	<i>15—19</i>	<i>20—24</i>	<i>25—34</i>	<i>35—44</i>	<i>Totals</i>
Males ...	3	34	129	330	54	8	—	2	2	562
Females	7	38	123	337	47	6	4	1	1	564
TOTALS	10	72	252	667	101	14	4	3	3	1,126

The age group 5—9 years accounted for 60·2% of the cases.

The highest number of notifications, 51, were received during the week ending 15th March, the lowest number of notifications, 3, being received during the week ending 20th September.

The following notifications have been received during the past six years.

	<i>1958</i>	<i>1957</i>	<i>1956</i>	<i>1955</i>	<i>1954</i>	<i>1953</i>
Cases	1,126	782	612	899	898	1,425
Deaths	1	0	1	0	0	0

Smallpox

There were no cases of smallpox in Birmingham during 1958. Surveillance was required over a period of 21 days for an immigrant.

Smallpox Vaccination

See Immunisation Section (Page 91).

Typhoid

During 1958 there were four confirmed cases of typhoid as follows :

A boy aged 6 years became ill on the 4th February and was admitted to hospital on the 12th February and found to be suffering from typhoid fever—phage type A. On investigation of the home conditions it was found that his grandmother, who had lived most of her life in India, was a carrier of the same organism. She had come to this address two years previously. Other members of the family gave negative stool specimens. The grandmother was admitted to hospital where an intensive course of treatment for her carrier state was unsuccessful but, after removal of her gall bladder, negative stool specimens were eventually obtained from her.

The second case was that of an Italian girl aged 26 years who, on the 11th and 12th July, travelled by train from Milan to Birmingham. Her illness confined her to bed on the 3rd August and a typhoid organism of a degraded Vi strain was isolated. She may have become infected whilst travelling from Milan to England.

The third case occurred in a woman aged 28 years who was admitted on the 5th November to hospital for confinement which took place the next day. Within 24 hours of delivery her temperature rose and failed to respond to administration of antibiotics. A blood culture on 13/11/58 was negative but when repeated on 15/11/58 a typhoid organism of variety 3.D.1 was isolated. The baby remained healthy and no secondary case arose in the hospital, although it became necessary to stop admissions for a period. The onset of the illness was masked from the first by the administration of antibiotics. An extensive search for carriers proved negative but the possibility of the patient having been infected by eating grapes seemed the only likely one.

It was found that infection by this type of organism is very rare, three cases only having occurred in the country during the previous few months.

The fourth case was that of an Indian aged 27 years, who had only been in England about three weeks. He was unemployed and was in the

tenth day of illness when admitted to hospital. It was, therefore, assumed that he had brought the infection with him.

There were no deaths and no secondary cases arose.

A series of specimens from each recovered case indicate that none have become carriers.

Venereal Disease

	<i>Name of Hospital or Clinic</i>	<i>Syphilis</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
No. of cases under treatment on 1st January, 1958	General	975	670	571
	Children's	—	—	—
	Summerfield	19	—	—
	TOTALS	994	670	571
New cases coming under treatment during 1958	General	150*	1,354	2,405
	Children's	—	1	38
	Summerfield	4	—	—
	TOTALS	154	1,355	2,443
Total number of attendances during 1958	General	15,428	7,796	8,730
	Children's	—	1	113
	Summerfield	555	—	—
	TOTALS	15,983	7,797	8,843
No. discharged after completion of treatment and or observation	General	73	586	1,997
	Children's	—	—	28
	Summerfield	2	—	—
	TOTALS	75	586	2,025
No. transferred to other centres	General	44	65	18
	Children's	—	1	10
	Summerfield	1	—	—
	TOTALS	45	66	28
No. who ceased to attend before completion of treatment and/or observation	General	178	767	156
	Children's	—	—	—
	Summerfield	8	—	—
	TOTALS	186	767	156

*Two had congenital syphilis, they were both men and both aged 33 years.

NUMBERS OF NEW BIRMINGHAM CASES OF VENEREAL DISEASE TREATED YEAR BY YEAR SINCE 1950.

<i>Year</i>	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other conditions</i>
1950	295	—	462	2,978
1951	208	—	525	2,366
1952	188	—	676	2,364
1953	148	—	571	2,352
1954	135	—	446	2,275
1955	156	—	463	2,431
1956	188	—	875	2,492
1957	192	—	1,138	2,213
1958	133	—	1,223	2,106

The considerable increase in gonorrhoea since 1955 is to be noted. This has not been associated with an increase in syphilis or "other conditions."

Whooping Cough

The total of 1,876 notifications of whooping cough was the lowest recorded since 1937 when there were 1,816. In recent years the notifications have been as follows :—

<i>1957</i>	<i>1956</i>	<i>1955</i>	<i>1954</i>	<i>1953</i>
2,191	4,563	2,955	4,112	6,049

In 1958 10·5% of the cases were under one year and 57·1% under five years of age.

There was no particular epidemic but the week ending 9th August had the highest number of notifications—68, and the weeks ending 15th March and 8th November, the lowest—13.

There were no deaths.

Whooping Cough Immunisation

See Immunisation Section (Page 84).

Public Health (Aircraft) Regulations, 1952

Health control of all the 153 aircraft arriving at Elmdon Airport during 1958 from outside the "excepted area" was carried out uneventfully.

International Certificates of Vaccination

During 1958, under the International Sanitary Regulations, 1952, 4,205 International Certificates of Vaccination against Smallpox, Cholera, Typhoid and Paratyphoid, were checked, stamped and countersigned.

There was, however, a big decrease from the previous year, which itself was a record, when 7,587 certificates were dealt with.

INFECTIOUS DISEASES 1958.

Confirmed Cases

AGES

DISEASE	Sex	0-	1-2	3-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75 up	Totals
Diphtheria	M. F.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Dysentery	M. F.	20 10	49 43	34 39	56 69	19 11	8 15	4 17	21 41	14 32	4 11	10 7	4 6	3 15	246 316
Encephalitis Acute Infective	M. F.	2 —	— 1	— 1	— 1	1 1	1 —	1 —	2 —	— —	2 —	— —	— —	— —	9 4
Encephalitis Post Infectious	M. F.	— —	— —	1 —	— —	— —	— —	1 —	— —	— —	— —	— —	— —	— —	2 —
Erysipelas	M. F.	— —	— —	— —	— 1	1 1	— 1	1 1	6 6	12 7	13 19	14 12	7 14	7 9	61 71
Food Poisoning	M. F.	3 8	10 3	1 5	3 5	6 3	7 33	26 40	35 43	31 41	4 17	9 9	— 2	— 2	135 211
Malaria	M. F.	— —	— —	— —	— —	— —	— 1	1 —	2 —	2 —	— —	— —	— —	— —	5 1
Measles	M. F.	107 103	516 522	572 552	838 826	36 25	12 14	6 13	10 7	1 3	— —	— —	— —	— —	2,098 2,065
Meningococcal Infection	M. F.	8 2	7 3	1 1	2 1	— —	— —	— 1	— —	1 —	— 2	— 1	— —	— —	19 11
Ophthalmia Neonatorum	M. F.	225 188	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	225 188
Paratyphoid Fever	M. F.	— —	— —	— —	— —	— —	2 —	— —	— —	1 —	— —	1 —	— —	— —	1 3
Poliomyelitis Paralytic	M. F.	— 1	5 4	3 1	6 4	1 1	1 1	— 1	3 3	1 1	— —	— —	— —	— —	20 17
Poliomyelitis Non-Paralytic	M. F.	— —	— —	3 —	2 —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	6 —
Pneumonia	M. F.	16 10	18 26	19 11	21 25	11 7	7 5	12 4	34 21	30 29	40 39	75 44	33 38	21 29	337 288
Puerperal Pyrexia	M. F.	— —	— —	— —	— —	— —	— 40	— 173	— 136	— 38	— —	— —	— —	— —	— 387
Scarlet Fever	M. F.	3 7	34 38	129 123	330 337	54 47	8 6	— 4	2 1	2 1	— —	— —	— —	— —	562 564
Smallpox	M. F.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Typhoid Fever.....	M. F.	— —	— —	— —	1 —	— —	— —	— —	1 2	— —	— —	— —	— —	— —	2 2
Whooping Cough	M. F.	95 102	219 188	230 271	332 393	15 17	1 3	— 1	— 4	— 2	— 2	— —	— 1	— —	892 984

IMMUNISATION

(SECTIONS 26 & 28—NATIONAL HEALTH SERVICE ACT, 1946)

In 1958 changes were made to unify the administration of the immunisation programmes undertaken by the Department. A medical officer in charge of the Immunisation Section and a senior administrative nursing sister were appointed, bringing the diphtheria, B.C.G. and poliomyelitis clinics into one section.

During the year, within the City 171,597 primary courses of immunisation were given. Of this number the Immunisation Section undertook 94,569 primary courses of immunisation and the general practitioners 77,028 ; this last figure being based upon their records of immunisation procedures sent to this Department for checking, payment and safe keeping.

Since immunisation procedures differ considerably from each other, the closest estimate of the total work undertaken by the Section in any one year is given by the total number of injections carried out. In 1958 the Immunisation Section carried out 207,874 separate injections made up as follows :—

Diphtheria, and diphtheria and whooping cough combined	...	33,163
B.C.G. and Mantoux testing	... ..	30,942
Poliomyelitis	... ..	143,584
Smallpox vaccination (special groups only)	... ..	185
		<hr/>
TOTAL	...	207,874
		<hr/>

Diphtheria Immunisation

For the second year there was a welcome and significant increase in the number of children immunised against diphtheria. The figures for the last five years are as follows :—

1954	1955	1956	1957	1958
16,973	16,289	16,268	17,398	19,656

The total for 1958 was the highest since 1949 when 19,791 were immunised against diphtheria. This rise in the number of children receiving primary immunisation against diphtheria is due to the use of combined whooping cough and diphtheria vaccine. Parents are more ready to accept protection against diphtheria and whooping cough simultaneously than against diphtheria by itself.

Of the total number of children immunised against diphtheria, 10,068 were treated by general practitioners, which represents 52% of the total. The percentages of primary inoculations given by general practitioners in the last five years were :—

1954	1955	1956	1957	1958
51%	53%	57%	58%	52%

DIPHTHERIA CASES .

TOTAL PERSONS IMMUNISED.

INCREASE IN THE SIZE OF IMMUNISED POPULATION.
FALL IN NUMBER OF DIPHTHERIA CASES & DEATHS.

KEY

DIPHTHERIA CASES	
TOTAL PERSONS IMMUNISED	
DIPHTHERIA DEATHS	



REINFORCING INJECTIONS

There was a fall in the number of reinforcing injections against diphtheria, 11,984 having been given in 1958 compared with 12,961 in 1957. Of these 3,578 (30%) were given by general practitioners in 1958, the highest percentage yet recorded.

NUMBER OF IMMUNISATION SESSIONS

During the year a total of 1,629 sessions were held.

Infant Welfare Centres	...	646	Schools	...	...	...	681
Day Nurseries	...	...	173	Council House	...	...	50
Institutions	...	...	...	79			

Whooping Cough Immunisation

The introduction of the free combined vaccine, as well as increasing the number of children immunised against diphtheria, has also vastly increased the number given protection against whooping cough. The figures for the last five years were as follows :—

1954	1955	1956	1957	1958
2,083	3,433	5,205	8,213	15,697

The position cannot even now be regarded as wholly satisfactory. Whooping cough is most dangerous in the first year of life. Of the 9,519 children born in the first half of 1958, only 4,122 had received a course of immunisation against whooping cough by the end of the year. There is much work to be done to persuade parents to accept for their children early immunisation against this disease.

Protection Against Tuberculosis (B.C.G. Vaccination)

SCHOOLCHILDREN

There were slight administrative changes made in the B.C.G. vaccination of schoolchildren. In order to simplify the task of the head teachers it was agreed with them that children vaccinated against tuberculosis in any one school year should have attained their 13th birthday before the 1st September at the beginning of that school year. This will tend to decrease slightly the number of children to whom B.C.G. is offered in the school year 1958-59, but not subsequently. However, the figures for 1958 as a whole show a slight increase as compared with 1957. In 1958 a total of 17,360 parents were offered immunisation for their children compared with 17,284 in 1957. The percentage of parents accepting Mantoux testing and vaccination if necessary for their children was 76·3% compared with 80·2% in the previous year.

The number of children who are found to be Mantoux positive is showing a consistent decline from year to year.

1954	1955	1956	1957	1958
18·3%	15·1%	13·5%	13%	11·9%

Year of Birth		1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	TOTAL	ADULTS
Public Health Department	F.T.	18	58	80	114	150	991	1,067	510	194	37	16	13	17	8	6	3,279	10
	D.P.P.	1,711	3,588	556	210	153	78	11	2	—	—	—	—	—	—	—	6,309	—
General Practitioners	F.T.	40	358	116	52	48	36	19	5	3	—	1	1	1	—	—	680	5
	D.P.P.	2,411	5,750	812	165	115	78	35	16	4	2	—	—	—	—	—	9,388	—
TOTAL ...	F.T.	58	416	196	166	198	1,027	1,086	515	197	37	17	14	18	8	6	3,959	1 TAF
	D.P.P.	4,122	9,338	1,368	375	268	156	46	18	4	2	—	—	—	—	—	15,697	14 F.T.
COMBINED TOTAL DIPHtheria AND DIPHtheria/PERTUSSIS		4,180	9,754	1,564	541	466	1,183	1,132	533	201	39	17	14	18	8	6	19,656	15

4,180

12,325

3,151

NUMBER OF CHILDREN GIVEN REINFORCING INJECTIONS IN 1958

Year of Birth	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	TOTAL	ADULTS
Public Health Department	F.T.																
	D.P.P.																
General Practitioners	F.T.			2	435	1,550	292	43	26	7	6	5	—	1	1	2,368	3
	D.P.P.			1	267	802	111	16	3	5	1	2	—	—	2	1,210	1
TOTAL ...	F.T.			4	1,615	5,764	2,259	671	346	28	28	22	14	17	6	10,774	10
	D.P.P.			1	267	802	111	16	3	5	1	2	—	—	2	1,210	1
COMBINED TOTAL DIPHtheria AND DIPHtheria/Pertussis				5	1,882	6,566	2,370	687	349	33	29	24	14	17	8	11,984	11

0-4 years

1,887

5-14 years

10,097

NOTE :—F.T. is the material used to protect against diphtheria only.
D.P.P. is the combined diphtheria/whooping cough vaccine.

This reflects the diminished incidence of infectious cases of tuberculosis in the community as a whole.

For several years children found to have strongly-positive reactions to the Mantoux test have been given an immediate X-ray. In 1958 all the active cases of tuberculosis in schoolchildren were found in this group. (12 cases in 727 children). It is, therefore, a most fruitful method of case finding.

Number of parents approached	...	...	...	17,360	
Number accepting Mantoux test and if necessary vaccination with B.C.G.	...	...	...	13,263	= 76.3%
Number of children fully Mantoux tested (including children whose parents accepted in 1957 and who were tested in 1958)	...	...	...	13,342	
Number of children Mantoux Negative (11,638 were vaccinated)	...	...	...	11,673	= 87.4%
Number Mantoux Positive	...	...	...	1,597	= 11.9%
Number Mantoux Doubtful	...	...	...	72	
Number fully Mantoux tested one year after vaccination, as a check upon its effectiveness	...	...	...	899	
Number of above giving positive result	...	...	...	894	99.4%
One child was re-vaccinated					
Number of schools visited	...	...	...	191	
Number of visits to schools (includes 10 re-visits)	...	...	...	392	
Number of central clinics held for children who were absent when their schools were visited	...	...	...	22	

Among the schoolchildren who, because of their age, became eligible for Mantoux testing and B.C.G. vaccination, were some who, in previous years, had received B.C.G. vaccination because they were contacts of known tuberculous cases. They were offered the same treatment as their classmates, with the following result :

Number fully Mantoux tested : 29

Positive : 25 ; Negative : 2 ; Doubtful : 2.

DIABETICS

Patients suffering from diabetes have an increased liability to severe tuberculosis and therefore during 1957 arrangements were made for the B.C.G. vaccination scheme to be extended to them. There were twelve such patients. One was already Mantoux positive, but the eleven who were negative were all vaccinated and their Mantoux reaction thereby converted to positive.

CONTACTS

Mantoux testing and vaccination of contacts has continued as in previous years at a clinic in the Health Department. There was an

increase in the number of patients attending for first Mantoux tests ; 1,698 compared with 1,276 in 1957.

Number of Contacts receiving Mantoux test	...	...	...	1,698
Number of Contacts giving Positive Reaction	...	...	...	157
Number of Contacts giving Doubtful Reaction	...	...	...	23
Number of Contacts giving Negative Reaction	...	...	...	1,518
Number of Contacts giving Negative and Vaccinated	...	...	...	1,505
Number of Contacts (babies under 12 days old vaccinated without Mantoux test)	...	...	...	12
Number of babies who were vacc. in Maternity Hospital	...	...	...	46

All contacts received a Conversion Mantoux test three months after vaccination :—

Number fully Mantoux tested	...	...	...	...	1,238
Number Converted	...	...	...	...	1,224
Number Negative	...	...	...	...	11
Number Doubtful	...	...	...	...	3

Poliomyelitis Immunisation

1958 was characterised by an intensive campaign for the immunisation against poliomyelitis of children between 6 months and 15 years of age. During the year a total of 128,915 persons received two injections. This compares with 4,564 in 1956 and 34,446 in 1957.

The very large number immunised against poliomyelitis in 1958 could not have been done without the help of the general practitioners who carried out the primary vaccination by two injections of 57,123 persons. The distribution of the vaccine to the general practitioners was a matter to which a great deal of thought was given at the end of 1957 since the vaccine does not retain its immunising properties for long if kept at too high a temperature. The arrangements then made have proved most satisfactory. Orders for vaccine were placed by general practitioners by telephone giving the number of doses required and the times of their clinics. Where a general practitioner possessed a refrigerator at his surgery the vaccine was delivered before his clinic but at the time most suitable to the Department. If the general practitioner did not have a refrigerator at his surgery then the vaccine was delivered within the hour preceding his inoculation clinic. This work was undertaken by the Public Health Inspectors in the course of their normal duties. The excellent co-operation received from the Chief Public Health Inspector and his staff has enabled us to provide the general practitioners with an efficient service. During the year the Inspectors undertook 5,794 visits to general practitioners and distributed a total of 119,362 c.c. of vaccine.

The Public Health Department gave two initial doses to 71,799 persons. Of these 21,336 were pre-school children, 49,860 schoolchildren and 603 adults. Of the 49,714 children from maintained schools immunised by the Public Health Department, 19,760 had their immunisation completed at school and 29,954 were completed at clinics held by the

Public Health Department. These inoculations were carried out at a total of 1,223 sessions, at schools, welfare centres and the immunisation clinics at the Council House. Of this total, 213 were clinics held in the early evening and on Saturday morning. In this work the clinic medical officers undertook a certain number of sessions in the summer months.

The work of the Department was greatly increased by there not being sufficient supplies of the appropriate vaccine in the middle of the year. By the end of July all children whose parents had requested on their behalf vaccination with American or Canadian vaccine had received two injections. However, parents who wished their children to be immunised with British vaccine had to wait some time longer. All these were given an opportunity to have their children immunised with American or Canadian vaccine if they so wished. By the end of the year all children registered with the Department had received at least one offer of immunisation. Some 12,000 however, still preferred to wait for British vaccine.

The need to offer parents, who had registered their children for British vaccine, an opportunity to have them immunised with American vaccine caused considerable duplication of the work of the Immunisation Section. Throughout the year a total of 194,015 opportunities for vaccination were given at school or infant welfare centres. There were 49,491 absentees. Had all the appointments been kept the Section could have immunised a further 24,745 persons during the year.

The number of expectant mothers who availed themselves of the offer of vaccination against poliomyelitis was disappointing. In all a total of 3,225 mothers received two injections. This represented some 16·8% of all pregnant women in the City. One hundred and seven received a third injection. At the end of the year every effort was being made to encourage more expectant mothers to accept immunisation.

FURTHER GROUPS FOR VACCINATION

In September 1958 the Ministry of Health extended the scheme for vaccination against poliomyelitis to include all people born on or after 1st January, 1933; medical students and their families; and hospital staff in contact with patients, and their families.

The Ministry also advised that persons who had received two injections should be offered a third injection at least 7 months after the second injection had been given. By the end of the year a total of 679 persons in the age group 15–25 years had received two doses and 2,110 persons of all eligible groups had received a third injection.

REACTIONS

Reactions to poliomyelitis vaccination were very few and none in Birmingham have been serious. One adolescent girl developed a shallow ulcer after her second injection. She had a history of having had allergic reactions to penicillin injections and to diphtheria immunisation. It was presumed that this was a mild allergic response to the vaccine.

POLIOMYELITIS IMMUNISATION

NUMBER OF INDIVIDUALS WHO RECEIVED TWO INJECTIONS (AND THIRD INJECTIONS) AGAINST POLIOMYELITIS DURING 1958.
(AGE GROUPS 1933 TO 1958, PLUS SPECIAL GROUPS)

<i>Year of Birth</i>	<i>1958 6 mths. old</i>	<i>1957</i>	<i>1956</i>	<i>1955</i>	<i>1954</i>	<i>1953</i>	<i>TOTAL</i>
P.H. Department	149	1,989	7,504	7,269	2,101	2,324	21,336
General Practitioners	371	6,196	3,217	2,967	6,211	5,781	24,743
3rd Inj. (General Practitioners only) ...	9	180	161	115	182	170	817

6 MONTHS to 5 YEARS — 2nd Injections ... 46,079 3rd Injections^f... 817

<i>Year of Birth</i>	<i>1952</i>	<i>1951</i>	<i>1950</i>	<i>1949</i>	<i>1948</i>	<i>1947</i>	<i>1946</i>	<i>1945</i>	<i>1944</i>	<i>1943</i>	<i>TOTAL</i>
P.H. Department	5,217	4,793	2,873	2,817	3,115	3,562	7,430	6,474	7,691	5,888	49,860
General Practitioners	3,701	3,141	2,084	2,000	2,014	2,087	3,930	3,021	3,060	2,218	27,256
3rd Inj. (General Practitioners only) ...	152	127	122	80	85	115	141	113	119	66	1,120

6 YEARS to 15 YEARS ... 2nd Injections ... 77,116 3rd Injections ... 1,120

POLIOMYELITIS IMMUNISATION—Continued

<i>Year of Birth</i>	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	TOTAL
P.H. Department	3	1	—	—	3	—	—	—	—	—	7
General Practitioners	112	65	76	67	59	61	55	62	64	44	665
3rd Inj. (General Practitioners only) ...	3	1	3	—	—	—	—	—	—	—	7

16 YEARS to 25 YEARS ... 2nd Injections ... 672 3rd Injections ... 7

<i>SPECIAL GROUPS</i>	<i>Expectant Mothers</i>	<i>General Practitioners' Families</i>	<i>Hospital Staff</i>	<i>Nurses</i>	<i>Ambulance Staff</i>	<i>Other Eligible Adults (Including Colonial Service Officers and their families)</i>	<i>TOTAL</i>
P.H. Department	238	37	—	—	61	260	596
General Practitioners	2,987	844	451	2	25	150	4,459
3rd Inj. (General Practitioners only) ...	107	50	9	—	—	—	166

2nd Injections ... 5,048 3rd Injections ... 166

Vaccination Against Smallpox

Successful primary vaccinations totalling 9,837 were carried out in Birmingham during the year and a further 1,975 revaccinations. With the exception of 185, all these were carried out by general practitioners. Eight thousand four hundred and ninety five primary vaccinations were in children under the age of one year. This represents 44.1% of all children of this age and is a slight decline from the 44.9% of the previous year. The figure for England and Wales in 1958 was 44.5%. One hundred and eighty-five vaccinations were carried out by the staff of the Immunisation Section on certain special groups, i.e., medical officers, public health inspectors and ambulance staff.

NUMBER OF PERSONS VACCINATED (or re-vaccinated) IN 1958

<i>Age at date of vaccination</i>	<i>Under 1 year</i>	<i>1 year</i>	<i>2—4 years</i>	<i>5 to 14 years</i>	<i>15 years and over</i>	<i>Total</i>
Number vaccinated ...	8,495	390	249	237	466	9,837
Number revaccinated	—	7	43	135	1,789	1,974

Supply of Vaccines to General Practitioners

Arrangements for the distribution of poliomyelitis vaccine have been described above. Free diphtheria toxoid and free combined diphtheria and whooping cough vaccine is also supplied to the general practitioners.

During the year the total amounts were as follows :—

Diphtheria (Formol toxoid)	...	...	...	...	3,741 doses
Combined Diphtheria and Pertussis Vaccine	...	...	...	...	29,375 „
Poliomyelitis Vaccine	...	...	...	...	119,362 „
TOTAL					152,478 „

Smallpox vaccine is supplied direct by the Public Health Laboratory Service.

LABORATORY SERVICES

(a) Analytical Laboratory

The full establishment includes 15 analysts and, as in previous years, junior members changed with bewildering rapidity. Fortunately the hard core of senior staff remained unaltered. Three out of five junior assistants are now women, and this increase in the proportion of female staff is common in many public analysts' laboratories. Indeed, in 1958 and for the first time in England, a woman was appointed as public analyst of a large county authority.

Samples examined during the year totalled 9,746 and were made up as follows :—

Food and drug samples taken under the Food and Drugs Act,						
1955 : Foods	5,003	}	...	...	...	...
Drugs	536		...	...	...	...
Drug samples taken under local Drug Testing Scheme						672
Miscellaneous samples			...	...	...	3,535
						9,746

FOOD AND DRUGS ACT, 1955. The task of purchasing samples from over 6,000 grocery and allied shops, 300 pharmacies and various dairies within the City boundary falls on four sampling officers appointed under this Act. As usual among the foods, milk samples predominated. Out of a total of 2,895 samples examined, 2,487 came from farmers' churns, 403 were of bottled milk, and 5 were so called "appeal to cow" samples taken at farms for comparison purposes.

As with all natural products, milk is liable to considerable variation in composition ; it is not a " manufactured " article for which an absolute specification can be laid down. Accordingly " presumptive " minimum limits of quality are prescribed by the Sale of Milk Regulations, 1939, below which milk is presumed to have been watered or skimmed. The limits set are 3.0% fat and 8.5% solids-not-fat. On an average some 10% of all samples taken have a composition below these limits, and it is the problem of the analyst to determine whether the milk is naturally poor or whether it is adulterated. It is in this connection that the freezing point of the sample is of such paramount importance. It has been found that " genuine " milk, i.e. milk as it comes from the cow, has a freezing point depression (F.P.D.), independent of fat and solids-not-fat contents, varying within narrow limits only and with a minimum of 0.530°C. The act of watering milk diminishes this depression in proportion so that milk adulterated with 50% water has an F.P.D. of about 0.265°C.

The production of milk " naturally " poor in solids-not-fat is usually due to the breed of cow and/or seasonal variation ; that poor in fat to unequal intervals between milkings. Broadly speaking, the quality and quantity of fodder supplied influence the volume of milk produced rather than the quality, always providing the herd is healthy.

Two hundred and eighty-nine samples of milk or 10·0% of the whole (excluding 5 “appeal to cow” samples) were naturally deficient in quality or adulterated; of these 180 were deficient in solids-not-fat only, 87 in fat and 20 in both constituents, while 2 samples contained extraneous water but were of composition above the presumptive limits. Forty-four samples actually contained added water, the deficiencies in the remaining 245 samples being due to other causes.

The average composition of all the samples, again excluding those taken at farms, was :—

Solids-not-fat	...	...	...	...	...	8·74
Fat	...	...	...	...	...	3·73
Total solids	...	...	...	...	...	<u>12·47</u>

This is the highest figure since 1936 when the average total solids stood at 12·51%.

PROSECUTIONS. Two farmers were prosecuted for the sale of watered milk.

The first case arose as a result of the routine sampling of five churns at a City depot. Three of these samples contained up to 5% extraneous water, as indicated by the freezing point test. Formal sampling was instituted and was continued for three consecutive days. Out of a total of 15 formal samples, eight had F.P.D's smaller than 0·530, varying from 0·515 to 0·529°C., and indicating up to 4·3% extraneous water. The corresponding solids not-fat percentages ranged from 8·1 to 8·4%, and one sample had an atrocious fat content of only 1·8%. The farm was visited at the request of the farmer; the feed of the herd of 16 Friesian cows appeared to be sufficient and the cooler was found to be in good condition. Both evening and morning “appeal to cow” samples were taken, on which the analytical figures later obtained were greatly in excess of any given by previous samples, and there was no reasonable doubt that water had in some way been mixed with the milk. A plea of “guilty” was entered at the Court hearing and a fine of £5 was inflicted in respect of each of six summonses, a total of £30, together with costs of £1 12s. 0d.

The second prosecution also originated in the detection of extraneous water in four out of five informal routine samples from a farmer's churns. The F.P.D's varied from 0·508 to 0·526°C. and corresponding solids-not-fat from 8·1 to 8·2%. Formal sampling followed over four consecutive days with the following results :—

- 1st Day Four samples contained 4, 6, 6 and 10% extraneous water.
One sample was genuine.
- 2nd Day Two samples contained 8 and 7% extraneous water.
Three samples were genuine.
- 3rd Day One sample contained 5% extraneous water.
Three samples were genuine.
- 4th Day. Four samples were genuine and of good quality.

The farm was visited by sampling officers and subsequently proceedings were taken in respect of four adulterated samples. At the hearing a plea of " guilty " was entered and a fine of £5 in each case was imposed, making a total of £20.

Three farmers were responsible for samples in which traces only of extraneous water were detected. In each case it seemed obvious that carelessness only was involved: omitting to drain churns completely after rinsing or not emptying the milk line of rinsing water were typical examples.

A fourth farmer had more serious trouble—a hole in the cooler which was responsible for from 4 to 7% extraneous water in each of 10 formal samples taken over a period of 2 consecutive days. The fault was not detected until the farmer received his own third portions of the samples. Immediately this happened he made a thorough inspection of his milking plant, discovered the hole and had the cooler resoldered, with the result that the third day's formal samples were all genuine. The farmer admitted full liability, and his explanation was confirmed by sampling officers who made a visit to the farm.

In these four cases the Health Committee was satisfied with the explanations given and decided not to take legal proceedings.

Bottled milk is usually above suspicion, but a sample of sterilised milk had a composition of only 7.9% solids-not-fat and an F.P.D. of 0.497°C. which, when compared with 0.540°C. which is a reasonable standard for bulk milk, indicated the presence of 80% extraneous water. The crown cork stopper was in perfect order. Formal sampling on 3 consecutive days gave genuine milks with solids-not-fat of 8.5% in each case and F.P.D's of 540, 539 and 543°C. Correspondence with the dairy company concerning the watered informal sample showed that two problems were involved, i.e. the poor standard of milk from certain farms and teething troubles from their sterilisation plant. Only the latter could account for water being present. Great care is now being exercised to ensure that all tanks and pipes are thoroughly drained of cleaning water before a new operation of the sterilising process commences.

Letters of caution were sent to 93 farmers and one dairy company in respect of 217 samples naturally deficient in quality. It is a much more difficult matter to correct a natural deficiency in milk than it is to prosecute for deliberate adulteration. In certain cases it was suggested that the help of the local Agricultural Advisory Officers be sought on questions of feeding and general maintenance. Other steps which have produced good results include, firstly, the introduction of one or two Channel Island or South Devon cows into Friesian herds giving poor quality milk, and secondly, individual sampling of a herd and elimination of certain animals giving very low quality milk.

No administrative action was taken in the case of 44 samples from 41 farmers for the reason that other samples from the same consignment

were of sufficiently good quality to bring the composition of the whole bulk up to a reasonable standard.

Samples other than milk totalled 2,644, of which 2,108 were classed as foods and 536 as drugs. Thirty-eight articles of food were adulterated, of poor quality or misdescribed. Of these eleven had deteriorated, owing to careless preparation or the passage of time, and consisted of beef dripping (4) containing excess of free fatty acid and with a rancid taste and smell, essence of rennet with no clotting action, steak and kidney pie with the meat dried up and inedible, dried apricots containing a live maggot, dried mint contaminated with a rodent dropping, orange drink in a state of fermentation, and 2 tins of sweetened condensed milk the contents of which were unsound. Most of these cases were referred to the Food Inspection Department and, when necessary, stocks were destroyed.

Eight samples of beef or pork sausage were deficient in meat content. It will be remembered that in 1956 a Food Standards Committee Report recommended that regulations should be made providing for a minimum standard of meat content of 65% for pork and of 50% for beef sausages; this chiefly because the Committee realised that consumers cannot assess the nutritional value of sausage by inspection or taste. Implementation of this Report's suggestions has apparently proved not possible and the Minister of Agriculture, Fisheries and Food made a statement to this effect in July, 1958. The responsibility for making a standard (and one must be made) has thus been placed fairly and squarely on the shoulders of the public analyst. Unfortunately, assessment of the quality of a sausage does not end with knowledge of the meat content. The quality of the meat used is equally important, and this is just not possible to determine by analysis.

The Flour (Composition) Regulations, 1956, require all flour other than wholemeal to contain specified amounts of chalk, iron, vitamin B₁ and nicotinic acid. This is to replace valuable nutriment lost during the milling of the wheat. One sample of plain flour contained a slight deficiency of iron (1.53 instead of a minimum of 1.65 mgm per 100 gms flour) and no chalk at all. The explanation given by the millers was that "the night shift must have had trouble with the mixing machine." Another sample of plain flour contained excess of chalk (500 mgms of chalk per 100 gms of flour instead of 235 to 390 mgms) and two others were deficient in this substance to the extent of 35 and 55 mgms per 100 gms.

Three samples of margarine of a certain well known brand contained excesses of 0.3, 0.5 and 0.1% water, the maximum allowed being 16%. This was traced to the admitted fact that the manufacturers were deliberately (and legally, of course) adding water to the extent of the limit. As was to be expected, the factory control was just not good enough to ensure that all batches did not exceed 16%. The firm have now reduced the amount of water added and all samples should in future be correct.

Food Standards Orders were contravened by a sample of shredded suet (78% fat present instead of 83% minimum), by a specimen of fish cakes (25% fish instead of a minimum of 35%) and by a sample of home-made marmalade (61.3% soluble solids instead of 68½%). A black, currant juice cordial should have contained 10% blackcurrant juice whereas only 6% was present. The manufacturers used an imported concentrate. Suitable action was taken in all these cases.

Two samples were falsely labelled. A so called "orange and glucose drink" sold under a proprietary name was labelled in a somewhat ambiguous way. The manufacturers agreed and stated that new labels had in fact been printed and were now in use. An icing mixture claimed the presence of "glucose" among its list of ingredients, whereas in fact "glucose syrup" was present. "Glucose" is a specific name for a pure sugar and constitutes only about a quarter of glucose syrup. The makers willingly agreed to alter the labelling of their next supply of cartons.

Finally, a sample of candied peel contained 40 p.p.m. of copper instead of the recommended maximum of 20 p.p.m. The remainder of the stock was removed from sale.

Thirty drugs out of a total of 536 were of substandard quality or misdescribed. Drugs containing ammonia are particularly prone to deterioration; although in many cases prepacking in small containers with suitable stoppers provides an answer, there is always a demand for the "threepenny worth of sal volatile" or similar article, which necessitates the pharmacist having a stock bottle. In such cases some sympathy must be extended to the retailer. Four samples of ammonia, 2 of sal volatile and 2 of ammoniated tincture of quinine were all deficient in ammonia, and one sample of ammonia was not labelled with the name and address of the seller contrary to the Pharmacy and Poisons Act, 1933. A sample of disinfectant was incorrect for the same reason.

Samples of codeine tablets, sodamint tablets and health salts (2) were all of old stock which had deteriorated with the passage of time. Seidlitz powders contained excessive amounts of ingredients, and a zinc oxide and castor oil cream had 8.3% zinc oxide instead of from 7.0 to 8.0%. A specimen of glycerine and borax contained 5% excess of water.

Deficiencies of 48, 20 and 27% respectively of active ingredients were found in samples of salicylic acid ointment, bismuth lozenges and sulphur ointment.

The labels of six assorted samples of drugs were either false or misleading. One carton of medicinal glucose was covered with far too enthusiastic advertising, and the label on another carton stated the presence of 1% calcium glycerophosphate when actually none was present. The label of the former carton was drastically revised and it transpired that wrong labels altogether had been used in the second case.

Proprietary eye drops stated to contain 0.005% adrenaline were devoid of this substance. Stocks were removed from sale.

A sample labelled "bismuth digestive tablets" raised the interesting question as to whether the presence of only 1.25% bismuth carbonate in the presence of 33.25% other similar therapeutic substances (largely chalk) justified the description "bismuth." In our opinion, this was not so and indeed the manufacturers, when approached, agreed with us, and the label has now been redesigned and the word "bismuth" deleted from the title.

Two samples of Blaud's pills were incorrectly labelled "B.P." Such pills no longer appear in the current Pharmacopœia and their use is declining rapidly.

An indigestion mixture contained 185% excesses of all its three stated ingredients. It was discovered that the actual percentages present, as found by analysis, were the figures which should have been given on the label—the manufacturers had made an error in calculation. The stock was immediately withdrawn from sale and amending labels printed.

Finally, a sample of boric lint failed the official absorbency test, and an influenza mixture had no statement of ingredients on the label, as required by the Pharmacy and Medicines Act, 1941.

LOCAL DRUG SAMPLING SCHEME. Many of the most important drugs and preparations of the Pharmacopœia cannot be bought over the counter and therefore are not amenable to sampling under the Food and Drugs Act. In 1956 a local scheme of drug sampling was put into operation to overcome this difficulty, and has continued to operate very successfully. With the willing co-operation of the City's pharmacists, a qualified member of the staff takes any samples he wishes from the chemists' shelves.

During the year the analysis of the remainder of a selection of ointments carried over from 1957 was completed, a wide survey made of many galenicals and an investigation into stock mixtures was commenced.

Comprehensive reports were submitted to the Health Committee dealing firstly with ointments and secondly with the large field of galenicals. Results and comments were sent to the pharmacists concerned, and it is understood that the latter will take appropriate action when they receive adverse reports on quality.

Altogether a total of 672 samples was tested during the year, and this includes 100 samples taken from hospitals and manufacturers.

In the autumn of 1958 a liaison committee, for even closer co-operation between the local pharmacists and this Department, was established. The main purposes of this committee are to tell the pharmacists in broad outline the results we are finding and to keep them informed of future investigations; also to hear from them any problems they may have and which may be usefully investigated.

MISCELLANEOUS SAMPLES. These totalled 3,535 and were made up as follows :—

Public Health Dept.

Pasteurised and Sterilised Milks	...	...	...	1,935
Ice Cream and Iced Lollies	...	...	...	251
Atmospheric Pollution	...	...	...	192
Waters	...	...	...	346
Miscellaneous	...	...	...	14
				<hr/> 2,738

Water Department

Waters	280
Miscellaneous	...	...	...	37
				<hr/> 317

Other Corporation Depts. ... 130

Human Milks ... 119

Fertilisers and Feeding Stuffs ... 21

Miscellaneous from Private Individuals and Institutions ... 210

3,535

PUBLIC HEALTH DEPARTMENT SAMPLES. Pasteurised milk accounted for 1,835 specimens—1,397 from the Birmingham Health Dept. and 438 from neighbouring authorities. Six specimens of the former (all from one dairy company) and 8 specimens of the latter showed evidence of insufficient heating. Two hundred and fifteen samples of sterilised milk, made up of 165 from Birmingham and 50 from other authorities, all successfully passed the “turbidity” test, which indicates sufficient heat treatment.

The Food Standards (Ice Cream) Order, 1953, requires minimal contents of 5% fat, 10% sugar and 7½% non-fatty milk solids. This is a low standard and the large majority of the 203 samples examined gave compositions well above these limits. Even so, two samples showed deficiencies of fat in one instance and milk solids-not-fat in the other. Forty-eight samples of iced lollies were tested for metallic contamination. Two contained traces of lead above the 1.0 p.p.m. maximum recommended by the Food Standards Committee, the actual figures being 3.4 and 1.4 p.p.m.

Samples taken to measure the atmospheric pollution in the City numbered 192. They were taken from 8 sites maintained for the purpose in various central and suburban areas. Half of the samples consisted of rain gauge water, from which the total weight of sooty contamination can be calculated and the other half consisted of “sulphur candles,” which are devices to indicate the sulphur dioxide content of the atmosphere.

THE PUBLIC HEALTH AND WATER DEPARTMENTS combine to ensure the purity of the City's domestic water supply. Altogether the Health Department submitted a total of 346 waters and the Water Department a total of 280.

In addition to the routine samples mentioned above, waters from flooded basements and cellars were analysed with a view to establishing the presence or absence of Corporation water.

OTHER CORPORATION DEPARTMENTS. Seventy-six samples were tested for the Central Purchasing Department. Forty-eight of these consisted of soap, soap powder, etc., submitted with tenders for the supply of these articles to the Corporation, and 15 specimens represented subsequent deliveries for checking purposes. Nine cordials and squashes, 2 meat extracts and 2 soap powders were also examined for future contract purposes or as a result of complaints.

The Housing Management Department requested the analysis of 24 samples of paints, and the Parks, Welfare and Salvage Departments were responsible for submitting a total of 8 miscellaneous samples ranging from soil and straw to fertilisers.

For the Food Inspection Department an assortment of 16 samples were examined, mainly with a view to the identification of foreign matter or determination of fitness for human consumption. An unusual specimen was a mass of slimy matter resembling mucus found in a can of processed peas; microscopic examination showed the substance to be a mould growth.

THE BREAST MILK BANK submitted a total of 119 samples for the detection of the possible presence of water or cow's milk, and the Smallholdings Department sent in 21 samples of fertilisers and feeding stuffs under the official Act.

PRIVATE INDIVIDUALS AND INSTITUTIONS. Samples submitted totalled 210 and, as usual, consisted of a most diverse range of foods, drugs and miscellaneous objects, chiefly submitted on account of poor quality or with a request for the identification of foreign matter.

In 1958, two amendments were made to the Public Health (Preservatives, etc., in Food) Regulations, 1925—53. These regulations permitted, among other things, the importation and sale of citrus fruit containing the anti-rot agent diphenyl, provided the fruit had been wrapped outside the United Kingdom in wrappers impregnated with diphenyl to the extent of not more than 40 mgms per 100 sq. ins.

Improved methods of preservation including the use of ortho phenyl phenol, a substance closely related in structure to diphenyl, have been perfected, and the amending regulations are designed to take into account these changes. The first amending regulation permits the presence in imported citrus fruit itself of certain specified amounts of diphenyl, ortho phenyl phenol or mixtures of the two. The second amending

regulation permits the presence in imported apples, pears, pineapples, peaches and melons of certain specified amounts of ortho phenyl phenol only.

Following a Food Standards Committee report, revised limits for copper in food were issued in 1958 by the Minister of Agriculture, Fisheries and Food in conjunction with the Minister of Health. The previous general limits of 2 p.p.m. of copper for beverages ready to drink and 20 p.p.m. for other foods were retained, but the "special" list was increased by the addition of yeast and yeast products (maximum 120 p.p.m. copper on dry matter) and solid pectin (maximum 300 p.p.m. copper).

The Antioxidants in Food Regulations, 1958, came into operation in September, 1958. Traces of certain harmless chemicals have the power of preventing oxidative rancidity in oils and fats, and the new regulations permit the use of various gallates, butylated hydroxy anisole and butylated hydroxy toluene in specified amounts in certain fatty substances. Those foods principally affected are cooking fat, vitamin oils and concentrates, butter for manufacturing purposes and essential oils used for flavouring.

(b) Public Health Laboratory

Thanks are due to Dr. B. R. Sandiford, Director of the Public Health Laboratory, for the following information:—

SPECIMENS EXAMINED FOR THE CITY OF BIRMINGHAM

<i>Type of Specimen</i>	<i>Totals</i>
Throat swabs	239
Swabs, various	143
Sputa for tubercle bacilli	248
Faeces for pathogenic organisms	1,564
Bloods for agglutinins	130
Bloods for leptospirosis	51
Bloods for serological virus tests	172
Urines for pathogenic organisms	290
Milks for hygienic assay	1,409
Milks for tubercle bacilli	2,242
Ice creams for hygienic assay	679
Synthetic creams for hygienic assay	409
Creams for hygienic assay	222
Waters for hygienic assay	1,607
Foodstuffs for pathogenic organisms	12
Watercress for hygienic assay	166
Shellfish for hygienic assay	69
Milk churns and containers for hygienic assay	144
Specimens for virus culture	226
Miscellaneous specimens	50
	<hr/>
	10,072
	<hr/>

VENEREAL DISEASES EXAMINATIONS FOR BIRMINGHAM

<i>Specimens</i>				<i>Examinations</i>			
Blood	...	...	28,333	for Wassermann test	...	...	28,273
				for gonococcal fixation test	...	...	4,579
				for Kahn test	...	...	15,396
				for Laughlen test	...	...	12,587
Cerebrospinal fluid	...	...	726	for Wassermann test	...	...	726
				for cell count	...	...	230
Films of discharges	...	...	11,117	for gonorrhoea	...	...	11,117
Cultures	...	...	8,731	for gonorrhoea	...	...	8,731
Urine	...	...	74	for microscopical examination			74
				for culture	...	...	72
Total				Total			
	...	...	48,981		...	...	81,785

The following specimens of blood for Wassermann test were received from the Birmingham Ante-natal Clinics and Maternity Hospitals.

	<i>No. of Specimens</i>			<i>" Diagnostic " Reactors</i>
Ante-natal Clinics	3,054	6
Maternity Hospitals	5,461	20

TUBERCULOSIS

Notifications

There were 1,039 new notifications of tuberculosis during 1958, an increase of 66 (6·8%) compared with the record low figure of 973 in 1957, but 244 (19·01%) below the average for the 5 years 1952-56 (Table 1). The notification rate per 1,000 population was 0·94 compared with 0·88 in 1957.

The increase in notifications was entirely due to an increase in notifications of respiratory disease, notifications of non-respiratory disease showing a decline. It may also be noted that a large part of the increase in notifications occurred amongst those of Asian and Irish places of birth, all other birth-place groups showing comparatively small changes.

RESPIRATORY TUBERCULOSIS

The 926 notifications of respiratory tuberculosis in 1958 were 82 more than in 1957: the rate per 1,000 population increased from 0·77 to 0·85 (Table 2). The increase was much greater in men (from 536 to 611) than in women (from 308 to 315), but the notifications in each sex were substantially below the average for 1952-56 (Table 4). With regard to age-groups there were increases compared with 1957 in each sex in ages 0-4 and 10-14 years: older age-groups of women showed either no change or some decrease up to age 45 years: among women over this age a small increase occurred. Amongst males there was an increase at age 15-19 years (the 1957 figure was remarkably low), little change at age 20-24 years, and in all older age-groups increases of varying magnitude. Comparison of the 1958 notifications for 5 or 10 year age-groups with the averages for the period 1952-56 shows that for males there have been declines at ages up to 25 years, with only small and inconsistent changes in older age-groups. Amongst females there is little difference between 1958 and 1952-56 average in childhood, but an appreciable decline in age between 15 and 65 years.

Two notifications were received during the year for persons who had received B.C.G. vaccination under the scheme for school children.

NON-RESPIRATORY TUBERCULOSIS

Notifications of non-respiratory forms of tuberculosis numbered 113, a decline of 16 compared with 1957 and 19 below the average for the 5 years 1952-56. The rate per 1,000 for 1958 was 0·10. The notifications in males increased by 8 to 68, which is 4 above the average for the 5 years 1952-56, whilst for females there was a decline of 24 to the low total of 45, 23 less than the 1952-56 average.

With regard to the localisation of the non-respiratory forms of the disease, it is satisfactory to note that the decline occurred particularly

in an acute and serious form of the disease, viz., meningitis, reduced from 17 to 4. Other sites showed only small changes.

Mortality

The number of deaths due to tuberculosis in 1958 was 143, two less than in 1957. The unbroken fall in the number of deaths each year since 1947 was therefore just maintained, though the decrease between 1957 and 1958 was less than in any of the previous 10 years. The decline is so small that the death rate per 1,000 population was unchanged at 0·13. There were 6 deaths from tuberculosis in persons aged less than 25 years, one less than in 1957.

RESPIRATORY TUBERCULOSIS

There were 137 deaths from respiratory tuberculosis, an increase of 3 compared with 1957, just sufficient to increase the mortality rate from this form of the disease from 0·12 to 0·13 per 1,000.

There were 4 deaths from respiratory tuberculosis in persons aged less than 25 years: the greatest number of deaths again occurred in the age-groups 45–64 years, with 66 deaths. The greatest increase compared with the previous year was in women aged 65 years and over, among whom there were 15 deaths compared with 4 in the previous year.

NON-RESPIRATORY TUBERCULOSIS

The number of deaths was reduced from 11 to 6 with the rate unchanged at 0·01 per 1,000. Three deaths were due to tuberculous meningitis—one a child of school age, one a young adult female in the 15–24 age-group, and one female over age 65 years. One death of a person over age 65 was attributed to disseminated tuberculosis, one in the age-group 25–44 to abdominal tuberculosis, and one in the over 65 age-group to tuberculosis of the mediastinal glands.

DEATHS OF PERSONS NOT NOTIFIED BEFORE DEATH

Tuberculosis was recorded on the death certificates of 57 persons who had not been notified at the time of death: posthumous notifications were received for 15 of these, but no formal notification was received for the remaining 42. Compared with the previous year there was an increase of 21 in the number of cases for which no notification was received at any stage.

Contact Examinations

During the year 3,052 persons were examined at the Chest Clinic as contacts of known cases of tuberculosis, an increase of 80 compared with 1957. The number of persons notified as a result of the examination was

83 (2.7%) a considerable increase from the figure of 49 for the previous year. It may also be noted that, of the 101 notifications of respiratory tuberculosis in children aged 0-9 years, 58 were the result of these routine contact examinations.

A further 2,131 examinations of adult contacts were carried out at the Mass Radiography Unit.

Tuberculosis Visitors

The staff of 15 tuberculosis visitors made 43,969 visits to patients' homes during the year, 998 of these being first visits following notification. The extent and character of the work showed little change during the year, though increasing emphasis was laid on the importance of contact work, and it is possible that some of the increase in notifications of children was due to this intensification of effort.

The amount of material help made available followed fairly closely the pattern for 1957, substantially below the levels of earlier years in most respects.

Beds issued	275
Nursing materials supplied...	80
Food grants (free milk)	1,883
Grants for clothing, etc.	4
Chalets provided	2
Disinfections	309

Re-housing

HOUSES ALLOCATED TO TUBERCULOUS FAMILIES: 1946-1958

1946	...	...	...	...	...	...	...	...	79
1947	...	...	...	...	...	...	...	...	215
1948	...	...	...	...	...	...	...	...	234
1949	...	...	...	...	...	...	...	...	148
1950	...	...	...	...	...	...	...	...	196
1951	...	...	...	...	...	...	...	...	349
1952	...	...	...	...	...	...	...	...	402
1953	...	...	...	...	...	...	...	...	367
1954	...	...	...	...	...	...	...	...	333
1955	...	...	...	...	...	...	...	...	243
1956	...	...	...	...	...	...	...	...	201
1957	...	...	...	...	...	...	...	...	219
1958	...	...	...	...	...	...	...	...	201
TOTAL									3,187

The number of tuberculous families re-housed was 201 ; 18 less than in 1957. 116 families were re-housed under the scheme for urgent re-housing of tuberculous families with special needs, the remainder under the normal operation of the points scheme. The operation of these schemes requires a great deal of work by the visitors and clerical staff, a total of more than 600 applications being considered as to the best way in which they could be helped with their housing problems.

Rehabilitation

The figures for special forms of help given to patients to assist their return to work show practically no change from the previous year. It is unfortunately not possible to produce the most important and most encouraging figure of all, which is of patients who need no special assistance because they are able to return to their former work after treatment, or have no difficulty in obtaining suitable work through the usual methods of anybody seeking work. The following table summarises the results for those patients whose prospects for work were discussed by the chest physician concerned and the Disablement Resettlement Officer.

Sheltered Factory (Remploi)	...	...	45
Industrial Rehabilitation Unit	...	...	109
Government Training Centre	...	...	37
Open Industry	...	...	240
Deferred	...	...	7
Papworth Village	...	...	1

Domiciliary Occupational Therapy

The work of this Department showed a further decline during the year because there were fewer patients needing this service. There are two reasons for this decline—the prompt admission of newly diagnosed patients to hospital which is now possible, and the fact that the great majority of patients leave hospital non-infectious and reasonably active, and hence able to return to normal work after a short interval. An increasing proportion of patients needing occupational therapy are at or near retiring age, or have some disability in addition to tuberculosis which prevents their early return to work.

The declining need for occupational therapy affected both aspects of the department's work, visits to patients' homes being reduced to 1,741 (from 2,319 in 1957) and attendances at the Occupational Therapy Centre being reduced to 801 (from 1,682 in 1957).

Although the number of patients for whom occupational therapy in the home has been required is reduced, there can be no doubt of its value to those whose disability is of such a degree that their participation

in normal activities is greatly reduced. The range of the service was similar to that of previous years, with increasing interest in cane work.

Domiciliary Library Service

The scale of need for this service has also decreased with the reduction in the number of patients confined to bed at home. The patients are widely scattered and much travelling was required to supply books to the 43 patients served during the year.

Dental Clinic

The weekly clinic for dental treatment of patients with infectious tuberculosis was continued throughout the year, but again the attendances have been considerably reduced as the number of such patients at home declines.

Statistics

TUBERCULOSIS—ALL FORMS

TABLE 1

PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901—1958

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	1,309	1.65
1911—1920 („)	—	—	1,284	1.46
1921—1930 („)	1,824	1.91	1,031	1.08
1931—1940 („)	1,284	1.24	883	0.85
1941—1945 („)	1,258	1.29	793	0.82
1946	1,300	1.28	689	0.68
1947	1,407	1.31	748	0.70
1948	1,294	1.18	696	0.63
1949	1,285	1.16	647	0.58
1950	1,253	1.12	518	0.46
1951	1,326	1.19	418	0.38
1952	1,384	1.24	303	0.27
1953	1,386	1.24	279	0.25
1954	1,241	1.11	235	0.21
1955	1,269	1.14	224	0.20
1956	1,136	1.02	161	0.15
1957	973	0.88	145	0.13
1958	1,039	0.95	143	0.13

RESPIRATORY TUBERCULOSIS

TABLE 2

PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901—1958

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	993	1·25
1911—1920 („)	—	—	1,059	1·20
1921—1930 („)	1,533	1·61	892	0·94
1931—1940 („)	1,082	1·05	793	0·76
1941—1945 („)	1,096	1·13	712	0·73
1946	1,135	1·12	616	0·61
1947	1,223	1·14	691	0·64
1948	1,132	1·03	650	0·59
1949	1,133	1·02	595	0·54
1950	1,133	1·02	486	0·43
1951	1,184	1·07	382	0·34
1952	1,242	1·11	280	0·25
1953	1,241	1·11	264	0·24
1954	1,104	0·99	222	0·20
1955	1,142	1·03	213	0·19
1956	1,029	0·93	150	0·14
1957	844	0·77	134	0·12
1958	926	0·85	137	0·13

NON-RESPIRATORY TUBERCULOSIS

TABLE 3

PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901—1958

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	317	0·40
1911—1920 („)	—	—	224	0·26
1921—1930 („)	290	0·31	139	0·14
1931—1940 („)	202	0·19	90	0·09
1941—1945 („)	162	0·16	81	0·09
1946	165	0·16	73	0·07
1947	184	0·17	57	0·05
1948	162	0·15	46	0·04
1949	152	0·14	52	0·05
1950	120	0·11	32	0·03
1951	142	0·13	36	0·03
1952	142	0·13	23	0·02
1953	145	0·13	15	0·01
1954	137	0·12	13	0·01
1955	127	0·11	11	0·01
1956	107	0·10	11	0·01
1957	129	0·12	11	0·01
1958	113	0·10	6	0·01

TABLE 4

NOTIFICATIONS OF RESPIRATORY TUBERCULOSIS BY SEX
AND AGE GROUP—1952-56, 1957 AND 1958

Age Group Years		Males			Females		
		1952/56 (Mean)	1957	1958	1952/56 (Mean)	1957	1958
0-4	...	38	14	27	34	20	35
5-9	...	32	20	15	33	24	24
10-14	...	28	15	21	28	20	29
15-19	...	61	26	41	68	38	36
20-24	...	68	57	56	77	53	53
25-34	...	119	102	121	114	69	55
35-44	...	101	97	100	52	45	34
45-54	...	111	95	103	28	19	25
55-64	...	90	74	89	18	10	10
65+	...	36	36	38	13	10	14
ALL AGES	...	684	536	611	465	308	315

TABLE 5

NOTIFICATIONS OF NON-RESPIRATORY TUBERCULOSIS BY
SEX AND AGE GROUP—1952-56, 1957 AND 1958

Age Group Years		Males			Females		
		1952/56 (Mean)	1957	1958	1952/56 (Mean)	1957	1958
0-4	...	6	2	5	8	6	2
5-9	...	9	4	1	9	3	4
10-14	...	6	2	6	6	7	3
15-19	...	6	7	3	8	4	4
20-24	...	9	6	3	10	14	6
25-34	...	15	15	19	14	16	11
35-44	...	4	12	19	5	9	9
45-54	...	5	9	6	4	7	3
55-64	...	2	2	3	2	2	2
65+	...	2	1	3	2	1	1
ALL AGES	...	64	60	68	68	69	45

TABLE 6

NOTIFICATIONS OF NON-RESPIRATORY TUBERCULOSIS BY SITE OF
DISEASE—(ALL AGES, BOTH SEXES)

Disseminated	...	...	...	...	...	...	...	7
Meningitis	...	...	...	...	...	...	...	4
Bones, joints and spine	...	...	...	...	...	...	...	29
Abdomen	...	...	...	...	...	...	...	13
Other organs, including glands	...	...	...	...	...	...	...	60
TOTAL	...	...	...	...	...	...	...	113

TABLE 7

DEATHS FROM RESPIRATORY TUBERCULOSIS BY SEX AND AGE GROUP

<i>Age Group Years</i>						<i>Males</i>	<i>Females</i>
0—4	...	...	...	...	...	1	0
5—14	...	...	...	...	...	0	1
15—24	...	...	...	...	...	2	0
25—44	...	...	...	...	...	15	7
45—64	...	...	...	...	...	55	11
65+	...	...	...	...	...	30	15
ALL AGES	...	...	...	...	...	103	34

TABLE 8

PLACE OF BIRTH OF 1039 INDIVIDUALS NOTIFIED AS SUFFERING FROM TUBERCULOSIS IN BIRMINGHAM IN 1958

<i>British Isles</i>						
England...	...	...	...	...	...	706
Scotland...	...	...	...	...	...	9
Wales ...	...	...	...	...	...	16
Ireland ...	...	...	...	...	...	153
<i>Rest of Europe</i>	...	...	...	...	...	13
<i>Asia</i>						
India ...	...	...	...	...	...	31
Pakistan	...	...	...	...	...	60
Others ...	...	...	...	...	...	16 (Includes Aden 11)
<i>Africa</i>	...	...	...	...	...	4
<i>America</i>						
West Indies	...	...	...	...	...	12
Other ...	...	...	...	...	...	3
<i>Not known</i>	...	...	...	...	...	16
TOTAL					...	1039

TABLE 9

RESULTS OF CONTACT EXAMINATIONS PERFORMED AT THE CHEST CLINIC DURING 1958

<i>Age Groups in years</i>	<i>Males examined</i>	<i>Found tuberculous</i>	<i>Females examined</i>	<i>Found tuberculous</i>	<i>Total examined</i>	<i>Found tuberculous</i>
0—15	816	28	734	31	1,550	59 3·8%
16—	749	13	753	11	1,502	24 1·6%
ALL AGES	1,565	41	1,487	42	3,052	83 2·7%

Contacts examined at the Mass Radiography Unit : 2,131.

CARE OF MOTHERS AND YOUNG CHILDREN

SECTION 22—NATIONAL HEALTH SERVICE ACT, 1946).

DAY NURSERIES

On the 1st January, 1958 there were 1,060 places for children in 22 day nurseries and one residential nursery maintained by the Committee. Attendances at day nurseries fell during 1958. The fall was most marked in nurseries serving the outlying areas.

On the 1st April, 1958 the order of priorities was revised and the fees were increased, as follows :—

Priority 1 : Admission of children whose mothers are wholly or mainly responsible for the maintenance of the family, or children whose admission is urgently necessary on other grounds such as the prevention of the break up of the family and the illness or confinement of the mother.

Standard maximum charge 6s. 0d. per day subject to reduction upon appeal to a charge of 3s. 0d. per day where all meals are taken.

Priority 2 : Admission of children upon medical grounds occasioned by unsatisfactory housing conditions or in such other circumstance as would seem to justify their admission for health reasons.

Standard maximum charge 6s. 0d. per day or 8s. 0d. per day where the husband is working or where both husband and wife are working, subject to reduction upon appeal to a charge of not less than 3s. 0d. per day where all meals are taken.

Non-priority : Admission of children on a temporary basis, irrespective of the economic or social circumstances of the family.

Charge £1 0s. 0d. per day ; 12s. 0d. per half-day including dinner ; 10s. 0d. per half-day excluding dinner.

There was a further reduction in the number of homeless women accommodated in the hostels who applied for the admission of their children to day nurseries. Nine children of six mothers were admitted during the year. With the exception of one child they were the children of unmarried mothers, unable to find other accommodation.

The number of coloured children attending the nurseries is still increasing. On the 31st December, 1958 there were 155 coloured children on the day nursery registers, an increase of 7 per cent. over last year.

Inspectors of the Ministry of Health visited the following nurseries during the year and gave approval for their continuance as training centres for the National Nursery Examination Board Certificate :—

245, Birchfield Road.	1, Soho Road.
1, Bournbrook Road.	40, Somerset Road.
127, Crossfield Road.	73, Trinity Road.
395, Monument Road.	428, Tyburn Road.

The two year training course for the National Nursery Examination Board Certificate continues. During 1958, 38 students were accepted for training. Three examinations were conducted in Birmingham — 26 candidates passed and 2 failed.

A study day for nursery matrons and deputy matrons was held on 9th July, 1958 and 32 matrons and deputies attended. Dr. H. M. Cohen, C.B.E., Principal School Medical Officer, gave an address on "The Handicapped Child". This was followed by a discussion and a visit in the afternoon to special schools for deaf, partially sighted and physically handicapped children.

The nursery training centre at Garrison Lane arranged an exhibition and discussion on music and books for trained nursery staff on the 29th October. It was attended by 25 wardens and nursery nurses and the exhibition was visited by many other nursery staff.

Nurseries and Child Minders Regulation Act, 1948

There are 53 persons and 15 premises registered under the Nurseries and Child Minders Regulation Act, 1948, and facilities are inspected regularly by members of the medical and health visiting staff.

Four hundred and fifty-nine places for children under the age of five years are now available.

There has been a large increase in the number of persons applying to be registered during the year.

	<i>Persons</i>		<i>Premises</i>	
	<i>Number registered</i>	<i>Places for children</i>	<i>Number registered</i>	<i>Places for children</i>
1st January, 1958 ...	37	153	13	183
New applications ...	23	104	4	68
Applications for registration of additional places ...	1	2	—	—
Resignations ...	7	31	2	20
31st December, 1958	53	228	15	231

Daily Guardian Scheme

This scheme is for the registration of women, taking care of children by day, who do not come within the provisions of the Nurseries and Child Minders Regulation Act, 1948. Each woman is paid £1 0s. 0d. for each quarter in which she has looked after children.

The premises are inspected regularly by members of the medical and health visiting staff.

Number on register, 1st January, 1958	...	...	...	...	...	44
Places available	...	...	...	...	...	72
Number of persons resigning during 1958	...	...	...	...	...	15
Number of new registrations	...	...	...	...	...	18
Number of children accommodated	...	...	...	...	...	38

MATERNITY AND CHILD WELFARE CENTRES

One new centre was opened during the year at Mapledene Road, Sheldon, on April 21st, bringing the total number of welfare centres to 52. In addition, three subsidiary clinics were instituted at Culmington Hall Tenants' Room, Longbridge, on alternate weeks from January 1st; Moorfield Hall Tenants' Room, Shard End, on alternate weeks from February 7th; and Elmwood Congregational Church School Room, Handsworth Wood, weekly from February 4th.

The number of sessions, including antenatal clinics, at which a medical officer was available for consultation totalled 6,971, compared with 7,606 in 1957.

The number of sessions, including antenatal sessions, for which nursing staff only were responsible reached 872, compared with 647 in 1957.

The number of children living outside the City who attended our peripheral clinics during the year totalled 493.

In addition to Lea Hall Child Welfare Centre being used as a report centre by a probation officer, two other probation officers based on the Harborne area now hold a report centre at Wentworth Road Child Welfare Centre. Facilities were granted to the Education Department for the holding of a speech therapy clinic at Lea Hall Centre from 8th September, 1958. Arrangements were also made for the Family Planning Association to rent facilities at the Treaford Lane Centre as a family planning clinic the first session of which was held on January 9th, 1958.

The number of parents' evening meetings held at various centres was 64, compared with 60 in 1957.

WORK AT LOCAL AUTHORITY CLINICS :

(1) Antenatal Clinics :

Two thousand, six hundred and thirty-five individual mothers attended the local authority clinics staffed by local authority medical officers, compared with 3,119 during 1957.

(2) Blood Tests :

General practitioners continued to send their patients to these clinics to have their blood withdrawn for examination, and in 1958 the number was 1,562 as compared with 1,622 in 1957.

(3) Relaxation Classes :

During the year, classes were held at 42 centres. One full-time and one part-time physiotherapist were employed for a total of 13 sessions a week. In addition, classes were taken by midwives and health visitors. Mothercraft classes are held in association with the relaxation classes and are taken by the health visitors.

(4) Postnatal Examinations:

The majority of mothers now attend their own general practitioners for postnatal examination but in 1958, 652 women attended local authority clinics for this important examination.

(5) Special Consultation Clinics :

Dr. Wood, consultant paediatrician from the Children's Hospital, held 20 special clinics at the Carnegie Centre in 1958 and examined a total of 58 infants.

The X-ray clinic, also at Carnegie, held 36 sessions in 1958, when total of 232 persons attended for radiography.

The special adoption clinic was also continued at Carnegie and 166 examinations were made in 34 sessions.

(6) Sewing Classes :

Sewing classes for mothers, held at 48 centres, attracted a total attendance during the year of 15,662.

(7) Health Talks :

Mothers made 18,355 attendances at health talks given during clinic sessions in the course of the year, in addition to 12,093 attendances at mothercraft classes held in conjunction with relaxation classes and antenatal clinics at hospitals, and to 1,712 attendances at parents' meetings held in the evening at some welfare centres.

(8) Chiropody Clinic :

This continued, as in previous years, to provide an average of four sessions per week.

Voluntary Workers. The last meeting of Welfare Clinic Voluntary Workers was held at the Kings Heath Centre on May 14th, 1958. At this meeting it was decided by those present that the Voluntary Executive Committee should be disbanded owing to lack of support. A notice to this effect was circulated to all voluntary workers, at the same time expressing the hope that they would continue the excellent service they were giving in many clinics.

AUDIOLOGY CLINIC

One thousand, six hundred and sixty-four children underwent screening tests for their hearing at welfare centres during 1958. Of these, 73 failed to pass a second test and were referred to the Audiology Clinic for further investigation. A further 20 cases were also referred by hospital consultants and other local authorities.

At each testing session a medical officer of this Department attends and, in turn, two of the six health visitors who have been specially trained for this work. In addition, there are several training sessions weekly in which each health visitor sees her own cases. Home visits are also paid where necessary. Reports of the tests on every child are sent to general practitioners and other interested persons.

We are indebted for helpful advice and willing co-operation from Miss North and Mr. Shorrock, the head teachers of Braidwood and Longwill Schools for the Deaf, one of whom attends each session, along with Miss Hall, the sister in-charge of the School Health Services Ear, Nose and Throat Clinic, to whom we are grateful for solving many liaison and administrative problems.

Every child requiring surgical treatment has received prompt attention from Ear, Nose and Throat Consultants and this greatly increases the value of the Clinic. Any children suspected of a hearing loss are seen by a consultant to ensure that any remediable defect is recognised. Thirteen were found to be suffering from Eustachian catarrh during 1958 and 11 of these had infected and enlarged tonsils removed. Seventeen children who attended training sessions at the Clinic were admitted to Longwill or Braidwood Schools during the year.

It is a pleasure to record the valuable and willing aid of Mr. N. Crabtree, Consultant Ear, Nose and Throat Surgeon to the School Health Service.

CARE OF THE UNMARRIED MOTHER

The proportion of live births which were illegitimate was 64·7 per 1,000 live births as compared with 64·1 per 1,000 live births in 1957. The total number of illegitimate births in Birmingham in 1958 was 1,247 as compared with 1,212 in 1957. The welfare of the illegitimate child gives increasing cause for anxiety as year by year the illegitimate infant mortality exceeds that for babies born legitimately, the former rate per 1,000 births being 39·3 compared with the rate for legitimate births of 24·1 per 1,000 births. The corresponding figures for 1957 were 33·8 and 24·0 respectively. A disturbing statement made in the Registrar General's Decennial Supplement for England and Wales, 1951, was that the mortality rates of illegitimate infants are much less accurate than those of legitimate infants partly because a proportion of the infants who are registered at birth as illegitimate and subsequently die, are not recorded as illegitimate at death registration: this has the effect of underestimating the infant mortality of illegitimate children by some 16 per cent. Apart from consideration of mortality the illegitimate child usually starts life with serious handicaps — social, emotional, moral and legal.

Three state registered nurses (two with Health Visitors' Certificate) are engaged in the care of the unmarried mother. Two of these nurses

also supervise the day nurseries. Forty-three per cent. of children attending the day nurseries on 31st December, 1958 were illegitimate. This service assists the unmarried mother to keep her child, by permitting her to go out to work.

During 1958, 935 women sought advice from the Department compared with 793 in 1957. Of these, 517 were having their first baby, 284 had had one or more illegitimate children ; 105 were married, 15 were legitimate pregnancies and 14 were resident outside the City. Of three homeless married women applying to the Department for advice and help, one was given temporary accommodation in Beechcroft Mother and Baby Home. Thirty-three girls under the age of consent came to the notice of the Department during 1958. The number of West Indian girls applying for assistance during 1958 was 215 as compared with 144 in 1957.

We work in full co-operation with social workers attached to the Diocesan Moral Welfare Council, the Roman Catholic Church, the Salvation Army and other voluntary associations. Arrangements are made for most of the young girls to be admitted to Lyncroft House, the Salvation Army Mother and Baby Home. Thirty-eight girls of 18 years and under and 14 girls aged 19 — 22 years were admitted there during 1958. The local authority pays maintenance costs to the Roman Catholic and Salvation Army Homes and visits are paid by medical officers from this Department.

In some cases suitable lodgings may be obtained and the Department can make an allowance to girls to enable them to keep their lodgings during the time they are unable to work.

Beechcroft Mother and Baby Home. Capacity : 18 mothers, 14 babies.

The local authority is responsible for this Mother and Baby Home which is non-denominational. The number of mothers admitted during 1958 was 113 and the number of babies was 95. Of the 113 admissions, one was a homeless woman and one was a legitimate pregnancy.

The health of the mothers and babies has been very good. Five mothers were admitted to hospital for varying periods for antenatal care, two for pyelitis and one with puerperal pyrexia. One mentally disturbed married woman was transferred to Rubery Mental Hospital on a three day order — she was finally persuaded to remain there until her confinement. She had a long-standing history of mental illness and was re-admitted to the mental hospital after the birth of her baby.

Three babies were admitted to hospital with minor illnesses.

One baby died in the Children's Hospital one month after birth from a staphylococcal meningitis (reported last year) ; while an anencephalic baby died a few hours after birth.

There were two stillbirths and eight premature births, of which three were triplets. There was one set of twins born.

Four of the babies had B.C.G. vaccination and 20 babies were vaccinated against smallpox.

The following arrangements were made for the children :—

- 39 babies were discharged home with their mothers ;
- 3 were discharged with their mothers to domestic posts ;
- 5 were admitted to foster homes ;
- 8 were admitted to residential nurseries ; and
- 43 were placed for adoption, 29 by the Children's Department.

The illegitimate child has an unhappy life, almost from its very beginning. During pregnancy the mother's attitude to her baby is one of resentment and the mother/child relationship suffers a poor start. Because of the almost inevitable separation of baby from the mother, breast feeding is usually unsuccessful and bottle feeding the rule. Twenty-nine out of 46 mothers having their first baby, returned from hospital to Beechcroft with the baby already on the bottle, 11 mothers who were keeping their babies were able to continue successfully with breast feeding, but where the babies entered day nurseries in order that their mothers could go out to work, weaning ensued. Five babies were premature, eight of the confinements were instrumental and there was one breech delivery.

If the unmarried mother has been in gainful employment with her insurance card stamped up to date, and she is accommodated in the mother and baby home until suitable arrangements are made for her future, she can be financially independent. Although often advised to take out an affiliation order against the putative father, the unmarried mother often prefers to be independent and the number of affiliation orders successfully completed is still low. The mothers require help and understanding because of their immaturity and lack of reliable friends.

Of the 46 girls admitted to Beechcroft having their first baby, 36 were under 25 years and 16 of these were teenagers.

Seventeen of these girls were factory workers, 11 were clerks or typists and 5 were nurses. Other occupations represented were hairdresser, teacher, cashier, 'bus conductress, shop assistant, waitress, canteen worker and petrol pump attendant.

Twenty-two of the babies were placed for adoption and 17 mothers kept their babies.

Forty-two of the girls had no financial help from the putative fathers.

Of the putative fathers, 29 were English, 7 Irish, 2 West Indian, 2 American, 1 Belgian, 1 Hungarian (Hungarian mother) 1 Indian, 1 Italian, 1 Yugoslav and 1 Welsh. Sixteen of them were under 25 years, 5 being teenagers, and 14 were married.

Unfortunately, the growth of financial and social security has not meant the lessening of emotional disorders which are often associated with increasing difficulties in home relationships and the loosening of family ties. Sixteen of these girls came from disturbed homes by reason of the death or separation of parents and one girl came from an adoptive home, having been told very late about her adoption. On the other hand, 27 girls seemed to have come from normal happy homes and five were only children.

One of the girls came from Jamaica, where her parents are living. Another girl came from a home where her mother suffered from nerves, her father drank, and she had a sister who had had an illegitimate child the year before. The baby was placed with the landlady to the putative father and he agreed to be responsible for him.

Of the 27 girls having their second baby, 20 were single girls and 7 were married. Twenty-two were English, 4 were Irish and one was Jamaican. All seven marriages had come to grief. Fifteen of the girls were under 25 years—two were 17 year olds. One of the girls gave birth to triplets, all apparently healthy, and they were later transferred to the National Adoption Homes. Twelve of the mothers were factory workers, four domestic workers, four 'bus conductresses, three shop assistants, three clerks and one nurse.

Twenty putative fathers made no financial contribution. Thirteen were English, five Irish, five Jamaican, one Scot, one Indian, one Pakistani and one unknown.

Sixteen of these mothers had their first child with them and were responsible for them. One of these girls who had been in the care of the local authority most of her life, gave birth to her second baby—the putative father was her sister's husband (a mental defective on licence). The baby was admitted to a residential home, her first child being in the care of the local authority.

Another of these mothers giving birth to her second illegitimate child was adopted at the age of three weeks by a midwife. The father of both the children is a married man with three children of the marriage. He helps her a little with money from time to time.

Seven of the babies in this group were placed for adoption and sixteen were discharged with their mothers.

Five of the mothers admitted to Beechcroft during 1958 had their third illegitimate baby and all were single girls. One had all three babies by the same father—his wife refuses to divorce him and he is responsible for maintenance. Another, who had already two children in the care of a Scottish local authority, was living with a man who was being sought after by the Police; he disappeared and the girl was charged. She came to Birmingham to a domestic post. After her return to Beechcroft from hospital she abandoned the baby, who is now in the care of the Local Authority.

Another of the girls, aged 22, had been in the care of the Birmingham Local Authority for many years. The first baby's father was a boy, formerly in care, who had married a woman twice his age who was also pregnant. The second baby died soon after birth. No arrangements had yet been made about the third baby, the mother and baby being in Beechcroft at the end of the year.

The babies of the other two girls had been accepted by the Children's Department for adoption.

Except for the first, the putative fathers of the other babies in this group had given no financial assistance.

Of the remaining mothers, ten were having their fourth baby, two their fifth and one her sixth but all were married women except one. This last girl, whose mother had died following childbirth, was adopted at an early age. Her own three previous children had been adopted and she was still in Beechcroft at the end of the year waiting for someone to adopt her fourth baby.

Eight of the children of these mothers had been placed for adoption.

All the marriages except one had broken up and one was a bigamous marriage. The Jamaican couple had three children of the marriage in Jamaica and this fourth baby was said to be illegitimate but the mother returned to her husband who was in Birmingham.

The cost of illegitimacy to the community in terms of misery and human suffering is immeasurable. The plight of such children must surely have prompted a Member of Parliament to bring forward his Private Member's Bill - the Legitimacy Bill. He said that illegitimacy was one of the worst crucifixes life could impose on a child. This Bill is designed to legitimise the child of any union whatever the status of the parents at the time of his birth, unless the mother and her husband are living together and the child is accepted and maintained by the husband.

STATISTICS

The Day Nurseries

(1) NUMBER OF CHILDREN ON DAY NURSERY REGISTERS.

	<i>0—1 year</i>	<i>1—2 years</i>	<i>2—5 years</i>	<i>Total</i>	<i>Average daily attendance for 1958</i>
1st January, 1958 ...	145	238	548	931	674 (738 in 1957)
31st December, 1958	106	210	484	800	

(2) ANALYSIS OF CHILDREN IN THE NURSERIES.

GROUP 1. Children whose mothers are the main or sole support or children whose mothers are ill, etc.

Unmarried mothers	347
Widows	42
Women separated from husbands	257
Husbands in prison	8
Husbands sick or disabled	16
Mothers' long term illness	33
Mothers' short term illness	20
Mothers' confinement	18
Mother dead	10
Mothers' desertion	21
	<hr/>
	772

GROUP 2. Children requiring admission for their health or proper development.

National Service, deaf or blind parents, etc.	20
Housing	3
Problem families	3
	<hr/>
	26

GROUP 3. Non-priority cases paying full fees 2

(3) NUMBER OF PRIORITY CHILDREN ON WAITING LIST
(i.e. Groups 1 and 2).

	0—1 <i>year</i>	1—2 <i>years</i>	2—5 <i>years</i>	<i>Total</i>
31st December, 1957 ...	58	39	46	143
31st December, 1958 ...	39	30	37	106

Child Welfare Clinics

(1) PERCENTAGE OF CHILDREN VISITED IN THEIR OWN HOMES
WHO ATTENDED CHILD WELFARE CLINICS

<i>Year</i>	<i>0—1 year</i>	<i>1—2 years</i>	<i>2—3 years</i>	<i>3—4 years</i>	<i>4—5 years</i>
1956 ...	74.1	65.6	40.0	30.3	24.4
1957 ...	72.2	65.2	38.8	28.9	23.6
1958 ...	70.3	62.0	35.7	25.6	20.8

(2) FREQUENCY OF ATTENDANCE AS A PERCENTAGE OF ATTENDERS
IN EACH AGE GROUP

<i>Children who made :</i>	<i>0—1 year</i>			<i>1—2 years</i>			<i>2—5 years</i>		
	<i>1956</i>	<i>1957</i>	<i>1958</i>	<i>1956</i>	<i>1957</i>	<i>1958</i>	<i>1956</i>	<i>1957</i>	<i>1958</i>
1—5 attendances	50.6	53.56	57.30	60.5	61.0	63.54	96.8	96.45	97.15
6 or more attendances	49.4	46.44	42.70	39.5	39.0	36.46	3.2	3.55	2.85

(3) CHILDREN'S CONSULTATION CLINICS

(BIRTH TO 5 YEARS)

Number of clinics held :

(1) With doctor attending	...	...	...	...	...	4,631
(2) Without doctor attending	...	...	...	...	...	872
New children attending	...	...	...	...	...	15,674
Total attendances	...	...	...	...	...	160,464
Average attendance per clinic	...	...	...	...	...	29
Total examined by doctor	...	...	...	...	...	66,912
Average seen by doctor per consultation	...	...	...	...	...	14

(4) ANTENATAL AND CHILDREN'S COMBINED CLINICS — CHILDREN ATTENDING

Number of combined clinics	...	...	...	...	...	1,982
New children attending	...	...	...	...	...	1,907
Total attendances	...	...	...	...	...	21,944
Average attendance per clinic	...	...	...	...	...	11
Total number seen by doctor	...	...	...	...	...	16,928
Average seen by doctor per clinic	...	...	...	...	...	8

(In addition the medical officer on an average examined 4.7 expectant mothers).

(5) INFANT WELFARE CLINICS WITH GENERAL PRACTITIONERS.

(a) At Welfare Centres :

Number of individual children attending :

under 1 year	465	} 1,129
1— 2 years	...	...	351
2— 5 years	...	...	313

Frequency of attendance :

<i>Individual children who made</i>	<i>0—1 year</i>		<i>1—2 years</i>		<i>2—5 years</i>	
	<i>No. who attended</i>	<i>% of G.P. clinic attenders</i>	<i>No. who attended</i>	<i>% of G.P. clinic attenders</i>	<i>No. who attended</i>	<i>% of G.P. clinic attenders</i>
1— 5 attendances	246	52.90	235	66.95	299	95.53
6 or more attendances ...	219	47.10	116	33.05	14	4.47
Total attendances	465	100%	351	100%	313	100%

Number examined by doctor	...	...	...	...	6,794
Number seen by health visitor only	...	...	...	...	2,220
Number attending for immunisation (including 3,775 polio-myelitis vaccinations)	...	...	...	...	7,337
Persons attending health talks by health visitors	...	...	...	...	7,221

(b) *At general practitioners' surgeries :*

Total attendances :

under 1 year	...	...	2,149	}	2,917
1— 2 years	...	...	266		
2— 5 years	...	...	284		
over 5 years	...	...	218		
Number examined by doctor	...	...	...	...	1,481
Number of children seen by health visitor	...	...	...	...	317
Number attending for immunisation	...	...	...	...	1,835
Persons attending health talks by health visitors	...	...	...	...	7,109

(6) MEDICAL DEFECTS RECORDED IN CHILDREN ATTENDING APPOINTMENT CLINICS

Number of individual children having a defect 6,796

Type of Defect :

(a) Eyes :									
Squint	...	...	...	...	...	...	...	...	317
Inflammatory condition	...	...	...	...	...	...	...	...	46
Other eye conditions	...	...	...	...	...	...	...	...	32
(b) Skin :									
Eczema	...	...	...	...	...	...	...	...	336
Purulent conditions	...	...	...	...	...	...	...	...	17
(c) Ear, Nose and Throat :									
Otorrhoea	...	...	...	...	...	...	...	...	52
Deafness	...	...	...	...	...	...	...	...	26
Enlarged or diseased tonsils and/or adenoids	...	...	...	...	...	...	...	...	1,687
Nasal obstruction and/or mouth breathing	...	...	...	...	...	...	...	...	178
(d) Teeth :									
Carious or defective	...	...	...	...	...	...	...	...	2,092
(e) Glands :									
Enlarged	...	...	...	...	...	...	...	...	844
(f) Heart :									
Congenital	...	...	...	...	...	...	...	...	102
Other abnormality	...	...	...	...	...	...	...	...	104
(g) Anaemia	...	...	...	...	...	...	...	...	23
(h) Lung conditions	...	...	...	...	...	...	...	...	106
(i) Rickets :									
Active	...	...	...	...	...	...	...	...	4
Rachitic deformities	...	...	...	...	...	...	...	...	24
(j) Orthopaedic conditions	...	...	...	...	...	...	...	...	1,597
(k) Mentality (retardation)	...	...	...	...	...	...	...	...	46
(l) Speech (delayed or defective)	...	...	...	...	...	...	...	...	117
(m) Enuresis	...	...	...	...	...	...	...	...	232
(n) Other conditions	...	...	...	...	...	...	...	...	43
Total defects									8,025

(More than one defect may have been found in the same child).

**(7) REMEDIAL EXERCISE CLINICS FOR CHILDREN HELD BY
PHYSIOTHERAPISTS.**

	1958	1957
Number of individual children attending ...	116	167
Number of sessions held :		
Remedial exercises only	139	193
Combined with relaxation	142	85
Total number of attendances	1,328	1,617

Care of the Unmarried Mother

(1) Arrangements for new cases in 1958	<i>First cases</i>	<i>Multiple cases</i>	<i>Married women</i>
Mother and Baby homes			
Beechcroft	44	23	19
Francis Way	15	4	5
Lyncroft House	43	—	—
Lahai-Roi	7	1	—
Woodville	30	2	1
Homes out of City	9	1	3
Own home entirely	8	5	5
Own home except for confinement ...	225	172	50
Left City before delivery	30	4	5
Antenatal Cases	106	72	17
Total	<u>517</u>	<u>284</u>	<u>105</u>

(2) Situation at the end of year	<i>No. of cases</i>	<i>Percentage</i>
Antenatal cases—		
(a) In mother and baby homes awaiting delivery	23	2·54
(b) In own home awaiting delivery	198	21·85
Mothers and babies still in Homes	33	3·64
Babies dead or stillborn	28	3·09
Babies adopted	80	8·83
Babies with foster mothers	21	2·32
Mothers having married babies' fathers	98	10·82
Mothers living with putative fathers	75	8·28
Mothers and babies having left City	70	7·73
Babies in Homes without mothers	27	2·98
Mothers at home with their babies	250	27·59
Not pregnant	2	·22
Miscarriage	1	·11
Total	<u>906</u>	<u>100·00</u>

(3) *Work of Administrative Staff*

Home visits, paid re unmarried mothers	...	...	...	...	...	608
Mothers visited in hospital	...	...	...	...	...	44
Office interviews — applications	...	...	...	...	...	920
Office interviews — other than applications	...	...	...	...	...	269
Office interviews re V.D.	...	...	...	...	...	6
Lodging money grant — no expenses or refunds.						

(4) *Girls dealt with under the age of consent :*

Aged 14 years	...	...	...	...	...	...	...	5
Aged 15 years	...	...	...	...	...	...	...	12
Aged 16 years	...	...	...	...	...	...	...	16
Total								33

(5) *Multiple pregnancies (excluding married women) :*

1st child died	...	...	...	...	...	...	...	16
1st child in residential nursery	...	...	...	...	...	...	...	13
1st child adopted	...	...	...	...	...	...	...	31
1st child in care of relatives	...	...	...	...	...	...	...	129
1st child with mother	...	...	...	...	...	...	...	86
1st child fostered	...	...	...	...	...	...	...	9
Total								284

Of these 284 cases, 55 are living with the putative father, 21 are married to the putative father and 76 have been dealt with previously.

(6) *Married women assisted — marital details :—*

Separated from husband	...	...	...	...	...	...	...	73
Divorced	...	...	...	...	...	...	...	10
Widowed	...	...	...	...	...	...	...	9
Living with husband	...	...	...	...	...	...	...	13
Total								105

Of these :—

Living with putative father	...	...	...	...	...	20
Married to putative father	...	...	...	...	...	0
Left City	...	...	...	...	...	6
In Beechcroft Mother and Baby Home	...	...	...	...	...	15
Baby died	...	...	...	...	...	6
Own home with baby	...	...	...	...	...	20
Baby adopted	...	...	...	...	...	14
Fostered	...	...	...	...	...	6
Antenatal	...	...	...	...	...	17
Not pregnant	...	...	...	...	...	1
Total						105

Fifteen married women with legitimate pregnancies also applied to the Department for help and one was admitted to Beechcroft. Fourteen resident out of City cases were also dealt with.

In addition three homeless married women applied to this Department for help during 1958. One was given temporary accommodation in Beechcroft.

The Audiology Clinic

Number of children on the register on 1st January, 1958	...	...	62
Number of children on the register on 31st December, 1958	...	...	75
Children from 1957 still attending on 31st December, 1958	...	...	18
New children from 1958 still attending on 31st December, 1958	...	...	57
Number of children seen for testing in 1958	...	...	93
Discharged as having normal hearing	...	...	42
Still under supervision	...	...	51
Number of children taken for training in 1958	...	...	63
Discharged in 1958	...	...	39
Number of children still on the register for training on 31st December, 1958	...	...	24

DENTAL TREATMENT

General

During the year under review it has been possible to develop a scheme for the re-examination of children whose treatment has been completed, at an interval varying from four to six months afterwards. This is an essential step if the maximum benefit from dental treatment is to be derived by the children concerned. The aim is to produce a nucleus of children with well looked after teeth who are conditioned to accept dental treatment and to take care of their mouths themselves as far as possible. The number to whom this opportunity can be extended is, of course, limited by the dental staff and surgery accommodation available.

The experience of the past few years suggests that treatment for children was also in need of a certain amount of rationalisation as it has proved to be difficult to carry out conservative measures extending over a considerable number of visits by young children. In general, therefore, while each individual case is considered on its merits, it was felt desirable to concentrate on saving the molar teeth, particularly the second molars, as these are more important from the developmental point-of-view, and to

rely to a large extent on hygiene measures and silver nitrate applications to preserve the remaining teeth. This enables treatment to be completed in a smaller number of visits and reduces the risk of exceeding the tolerance of young patients to dental treatment.

It is also pleasing to record in the case of both mothers and children a further increase in the number of teeth conserved during the year together with a reduction in the number extracted.

Radiographic work is centralised at Lancaster Street clinic and the mechanical work in connection with the supply of dentures is undertaken by the outside firm of technicians who have satisfactorily carried this out in the past.

Statistics

	<i>Mothers</i>	<i>Children</i>
Number examined	2,819	5,652
Number needing treatment	2,778	4,925
Number whose treatment was completed	1,862	4,778
Number of administrations of general anaesthetics	1,708	2,257
Number of teeth extracted with general anaesthetics	8,490	5,656
Number of local anaesthetics	1,288	Not applicable
Number of teeth extracted with local anaesthetics	1,365	Not applicable
Number of teeth filled	3,751	4,153
Number of mouths scaled by Dental Surgeons	614	Not applicable
Number of mouths scaled by Hygienist ...	293	Not applicable
Number of teeth treated with silver nitrate	67	5,572
Number of cases radiographed	123	5
Number of mothers supplied with dentures	1,028	Not applicable
Number of dentures supplied	1,765	Not applicable
Number of full upper or lower dentures	976	Not applicable
Total attendances	11,939	9,990

These figures show an increase in conservative treatment in the case of mothers of 14% and in the case of children of 7%. The decline in the number of extractions, noted last year, has continued, although the number of dentures supplied is very similar. The total number of sessions was 2,550 and the average attendance of children 3·7 and 4·6 mothers.

Professional Staff

It was again impossible to recruit any whole-time dental officers but the number of sessions worked by part-time dental officers has slightly increased. There have been changes in personnel, three officers having been appointed during the year whilst one has resigned. A total of sixteen part-time dental surgeons are now employed.

The number of sessions per week held at the various clinics at the end of the year compared with those at the end of 1957 are given below :—

					<i>End of</i> 1957	<i>End of</i> 1958
Lancaster Street	...	...	...	...	14	17
Carnegie	...	...	...	...	9	8
Treafoord Lane	...	...	...	...	12	16
Northfield	...	...	...	...	6	6
Kingstanding	...	...	...	...	5	5
Quinton	...	...	...	...	3	2
					<hr/> 49	<hr/> 54

Hygienist

The one remaining hygienist resigned at the end of June and it has not been possible to replace her. This is unfortunate as it means that fewer talks on Dental Health have been given at welfare centres and that dental officers have had to devote more of their time to chair-side talks to mothers on oral hygiene and to scaling of teeth and treatment of gum conditions. These are duties which were in many cases previously carried out by the hygienist. Up to the time of her resignation the hygienist had completed 293 scalings which had involved 514 attendances for treatment.

Accommodation

At Lancaster Street the Dental Clinic has now moved to first floor accommodation recently vacated by the Regional Hospital Board. This has made possible an up-to-date clinic provided with space for two dental surgeons to work at the same time and also a hygienist's room and the necessary ancillary services. The recovery room is close to the surgery which was not the case in the old accommodation. Decoration has been carried out in bright colours and the new clinic appears to be appreciated by both the patients and the staff. Work has commenced on the clinic at Farm Road and it is hoped that this will be completed in the early months of 1959.

Dental Health Education

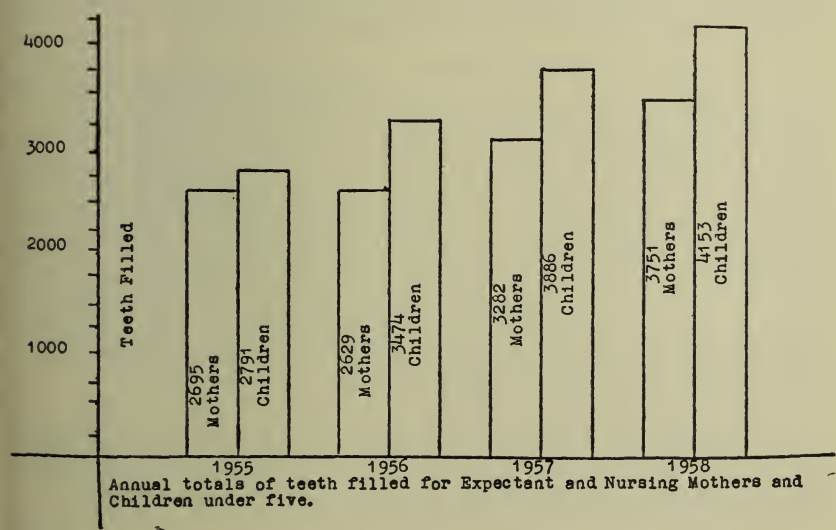
This aspect of Health Education has again received considerable attention during the year and the accepted means of disseminating knowledge on this subject have continued. These include talks to various groups, and displays and talks in welfare centres, etc. Efforts have continued to bring health visitors into the picture and to keep them informed on this subject, and close co-operation with the Health Education Section has been maintained throughout the year.

A stand at the National Trades, Homes and Gardens Exhibition at Bingley Hall in April was again organised and profited from the experience

gained last year, when such a stand was first organised. This year a larger area was allocated with three sides open to the public and a film show was substituted for the slides and a tape recorder used previously.

There was no difficulty in attracting a responsive crowd when films were being shown. This underlines the effectiveness of this method of presenting educational material. The stereoscopic viewer borrowed from the General Dental Council again proved very popular. The stand was manned in the evening by a rota of dental surgeons recruited from the Central Counties Branch of the British Dental Association, the Birmingham Dental Hospital and the Local Dental Committee. In the afternoons hygienists and dental attendants from the Public Health Department, the Dental Hospital and the School Dental Service were on duty. Only this help received from various sources, including those mentioned above, allowed the venture to be successful.

A display mainly concerning dental health was exhibited at the City of Birmingham Show held in Handsworth Park on 5th and 6th September, 1958. A film display was the main centre of attraction and confirmed the popularity and drawing power of this medium. This venture was felt to be well worth while as part of a plan to bring the need for dental health to a wider public.



DOMICILIARY MIDWIFERY

(SECTION 23—NATIONAL HEALTH SERVICE ACT, 1946)

The City midwives delivered 6,710 women in their own homes and 12 women had home deliveries by midwives in private practice in the City.

The ambulance midwives attended 149 women in their homes or in ambulances. Of these, four had been booked for home confinement, 104 for hospital confinement and 41 were unbooked emergencies.

A total of 12,129 confinements occurred in hospital. About two-thirds of these patients return home on the tenth day or later, and health visitors see them as soon as possible. The other third, discharged on the ninth day or earlier, are nursed on return home until the fourteenth day by domiciliary midwives.

Women discharged from maternity hospital ninth day or earlier	3,517
Women discharged on the tenth day and after, but nevertheless nursed by domiciliary midwives 	603
Total ...	4,120

Among the 4,120 patients attended by domiciliary midwives following discharge from hospital, in 221 cases the midwife found it necessary to continue to attend after the fourteenth day for reasons such as delayed separation of the cord, pyrexia of the mother and phlebitis.

Specially trained premature baby midwives care for all cases where the infant weighs under 5½ lbs. on discharge from hospital.

Antenatal care has continued at welfare centres with midwives and clinical medical officers in attendance. The patients are all those who book only a midwife for a home confinement; some of those who book a doctor and midwife and are attending at the request of the doctor; and some are among those booked for hospital confinement and whose interim care, by arrangement with the hospital, is given at welfare centres. Some general practitioners hold antenatal clinics either at their own surgeries or at welfare centres and almost always have the assistance of midwives and in some cases health visitors as well. This co-operation in antenatal care is fulfilling to a great extent the need for liaison between the authorities providing maternity services.

Women who book both a doctor and a midwife for home confinement are all visited at home by the midwife and those who do not attend a welfare centre have examinations by the midwife in their own homes.

The number of postnatal examinations carried out at local authority clinics is gradually diminishing as an increasing number of women book their general practitioners for maternity care. In 1958, 652 women attended local authority clinics (716 in 1957) and a total of 737 examinations was made.

The monthly midwives' meetings have provided information on current opinions from consultants and opportunity for discussion on various aspects of their work.

One supervisor of midwives and 11 midwives attended refresher courses during the year.

City midwives took part this year in the investigation into Perinatal Mortality organised by the National Birthday Trust.

During 1958 analgesia was administered by all the 106 full time City domiciliary midwives. Three sets of apparatus, approved for midwives to give Trilene, were purchased in October, 1958 and this form of analgesia is proving acceptable to patients. There are 110 sets of apparatus for gas and air analgesia, and every full-time midwife has one.

During the year 32 midwives, who are specially approved as teachers, undertook the district training of 126 pupil midwives (17 more than in 1957) studying for Part II of the examination of the Central Midwives Board.

Ninety-eight City midwives attended for a mass miniature radiography chest examination in 1958. In the light of modern knowledge Birmingham midwives are now required to attend for this only once in three years.

Four thousand four hundred applications were made in 1958 to the maternity bed bureau for hospital booking on social grounds. Of these, 2,912 were granted beds. Four hundred and seventy cases were investigated as to the suitability of their home conditions for a domiciliary confinement.

Emergency Maternity Service

A twenty-four hour mobile service is provided for the treatment of emergency complications of childbirth in patients' homes and is operated by a team which includes a consultant obstetrician and/or resident doctor and nurse belonging to the staff of a maternity hospital. Transport is by ambulance and specialised equipment is carried for the treatment of haemorrhage and obstetric shock. The team is summoned by the general practitioner or by the midwife in cases of urgency.

During the year, 106 calls for the service were made—a slight decrease from 114 of 1957—of which 18 were from outside the City boundary. An analysis of the 87 City calls is set out in table on page 136. Eighteen of these cases were removed to hospital and blood transfusion was given in the home in 57 instances. There were two maternal deaths—one had been delivered of a stillborn child before the arrival of the team, had been severely shocked and died from circulatory failure; the other, a multiparous (14th pregnancy) patient who had refused hospital antenatal care and delivery, died before the arrival of the squad. Death was due to exsanguination following rupture of the lower uterine segment (postmortem report).

Puerperal Fever and Puerperal Sepsis

Under the Puerperal Pyrexia Regulations, 1951, puerperal pyrexia is defined as "any febrile condition occurring in a woman in whom a temperature of 100·4° Fahrenheit (38° centigrade) or more has occurred within 14 days after childbirth or miscarriage" and must be notified to the Medical Officer of Health by the attendant medical practitioner.

Under the Puerperal Pyrexia (Amendment) Regulations, 1954, the doctor notifying the pyrexia is required to insert the cause of the pyrexia and the date of confinement or miscarriage on the notification form. There were 387 Birmingham notifications during 1958 and in addition 19 non-Birmingham residents confined in the City were notified. Two notifications were cancelled.

Ophthalmia Neonatorum

During 1958, 413 cases of ophthalmia neonatorum were notified (585 in 1957). Such notifications in Birmingham provide over 30 per cent. of National (England and Wales) figures, due essentially to the established custom in Birmingham of treating ophthalmia neonatorum with special care.

There were ten cases of gonococcal ophthalmia in infants in Birmingham in 1958.

Pemphigus

No cases were notified in 1958 in Birmingham although in some parts of the country a resurgence of this infant hazard seems likely.

Maternal Mortality

There were eight deaths, including two following abortion, ascribed to pregnancy and childbirth in the City of Birmingham in 1958 and a further four deaths due to associated conditions. This gives a maternal mortality rate, including abortions, of 0·41 per 1,000 live and still births and 0·41 per 1,000 live births.

A. Deaths ascribed to pregnancy and childbirth :

1. Not associated with a notifiable birth :

There were four deaths not associated with a notifiable birth. Two of these were due to abortion. The cause of death in the first was air embolism due to the injection of fluid into the genital passages. Death in the second case resulted from a cerebral abscess following a septic abortion. The uterus had been evacuated successfully in hospital and the patient under a course of antibiotics discharged herself prematurely on the fifth day. Six days later she was re-admitted, soon lapsed into unconsciousness and died sixteen days after her operation. The remaining two cases in this category had no antenatal care, one died in her home from a severe haemorrhage due to placenta praevia—the patient was moribund on the

immediate arrival of the practitioner ; the other was admitted to hospital in an unconscious condition and died from cerebral haemorrhage, due to toxæmia of pregnancy, shortly after admission.

2. Associated with a notifiable birth :

There were four deaths associated with a notifiable birth. To two the Emergency Medical Service was called.

The third death was of a primiparous patient who had been delivered of a congenitally abnormal baby. She was discharged from hospital on the seventh day and spent a considerable amount of time in bed with " emotional stress." On the thirteenth day after delivery she attended the baby's funeral, felt choked and ill, called for a receptacle and died. Death was attributed to pulmonary embolism.

The fourth death occurred with a second pregnancy. This mother received adequate antenatal care. She was admitted to hospital, the membranes having ruptured, but labour was delayed and finally a caesarean section was performed and a live baby delivered. Subsequently the mother had a moderate haemorrhage with sudden collapse. Despite all resuscitation measures, she died. The post-mortem findings were of shock and haemorrhage following obstructed labour, failed forceps, torn perineum and caesarean section.

B. Death due to associated conditions :

Heart disease was responsible for one death. The patient's age, forty years, and condition made termination advisable but her desire to carry on with the pregnancy was acceded to. She was closely observed and early in pregnancy was admitted to hospital for a brief period of rest. At the twenty-fifth week she was re-admitted as an emergency, severely cyanosed and with a failing heart, probably due to a pulmonary embolus. Her improvement was satisfactory and on the thirty-ninth week a surgical induction of labour was performed. The delivery was easy but with a heavy postpartum haemorrhage. Her recovery was excellent but then her condition slowly deteriorated and death occurred eleven weeks after delivery from heart failure. A postmortem showed a venous thrombosis and severe mitral valve disease.

The second death was due to uraemia in a patient who had had a previous attack of chronic nephritis. From the twenty-fifth week her blood pressure and blood-urea level rose with a heavy attendant albuminuria. A caesarean section was performed successfully at the thirty-sixth week. Seven days later she had a haematuria with multiple skin haemorrhages and died.

The third death was in a multiparous patient who developed paralytic poliomyelitis at term. Her respiratory muscles became involved and she died twenty-four hours after the delivery of a live baby by caesarean section.

The fourth died from pulmonary moniliasis following the delivery of a macerated infant. Antibiotics were given but immediately stopped when the sputum showed a massive growth of fungus. The patient's condition deteriorated and she died from pulmonary moniliasis and lung abscesses eleven days after delivery.

Statistics

(1) ANTENATAL AND POSTNATAL CLINICS

(a) *Local Authority clinics :*

(1) Number of separate antenatal clinics held with medical officer present	358
New expectant mothers attending these clinics	828
Total attendances at these clinics	5,628
(2) Expectant mothers attending combined antenatal and children's clinics :—	
New expectant mothers registered	1,385
Total attendances	9,323
Total individual mothers attending both types of clinic	2,635
(1) & (2) Total attendances	14,951
Number of antenatal clinics with midwife only	341
Number of new expectant mothers registered	953
Total attendances	3,587
Number of primary postnatal examinations at clinics	652
Total number of postnatal examinations	737

(b) *General practitioner clinics at welfare centres*

Antenatal :

Total of examinations of mothers	8,563
Number of new mothers registered	1,397
Number of Rhesus tests taken	520
Number of Wassermann reaction tests taken	414

Postnatal :

Number of new mothers examined	610
Number of re-examinations	94

(2) PRACTISING MIDWIVES

Number of City domiciliary midwives	106
Number of independent domiciliary midwives	9
Number of midwives in institutions	215
Number of midwives in Birmingham Fire and Ambulance Service	13
Number of midwives in private nursing homes	7
Number of City domiciliary part-time midwives	16
Number of independent maternity nurses	9
	<hr/>
	375

(3) MIDWIVES CEASING TO PRACTISE IN THE CITY.

Domiciliary midwives and part-time midwives who left the City in 1958	...	...	...	...	...	...	...	9
Independent domiciliary midwives and maternity nurses ceasing to practise	...	...	...	...	...	...	...	3
Birmingham Fire and Ambulance Service midwives ceasing to practise	...	...	...	...	...	...	...	1
Hospital midwives ceasing to practise	...	...	...	...	...	...	...	73
Midwives in nursing homes ceasing to practise	...	...	...	...	...	...	...	3
TOTAL								89

(4) DOMICILIARY MIDWIVES IN PRACTICE

	No. in practice 31.12.57	Number retired during year	Number resigned or ceased to practise during year	Deaths	New appoint- ments	No. in practice 31.12.58
<i>Employed by local authority :</i>						
(1) Midwives	101	—	9	—	5	97
(2) Part-time midwives	14	—	—	—	2	16
(3) Ambulance midwives	10	—	1	—	3	12
<i>In private practice :</i>						
(1) Living in City	12	—	2	—	—	10
(2) Living outside City	6	—	1	—	—	5

(5) WORK OF SUPERVISORS OF MIDWIVES

Routine visits to midwives	...	...	...	...	...	187
Special visits to midwives	...	...	...	...	...	430
Visits re stillbirths	...	...	...	...	...	11
Visits re neonatal deaths	...	...	...	...	...	7
Nursing and deliveries supervised	...	...	...	...	...	402
Visits to ophthalmia neonatorum cases	...	...	...	...	...	333
Unsuccessful visits	...	...	...	...	...	66
Number of interviews with midwives	...	...	...	...	...	859
Other interviews	...	...	...	...	...	128
Other visits	...	...	...	...	...	175
Lectures given	...	...	...	...	...	5

(6) CHEST RADIOGRAPHY OF ANTENATAL CASES

Number examined by miniature film	...	...	...	6,021
Recalled for further examination	...	...	...	126
Failed to attend for further examination	...	...	...	3
Found normal on further examination	...	...	...	71
Abnormality shown—further examination requested	...	...	...	52
Abnormality shown—diagnosed on miniature film	...	...	...	47

Analysis of results of survey

1. <i>Normal cases</i>	...	...	...	...	...	5,919
2. <i>Pulmonary tuberculosis</i>						
(a) Referred to Chest Clinic (for assessment and/or treatment)	...	...	...	...	...	20
(b) Referred to family doctor only	...	...	...	...	...	7
(c) No action necessary	...	...	...	...	...	22
						—
TOTAL	...	...	...	...	...	49
						—
3. <i>Non-tuberculous conditions of heart or lungs</i>						
(a) Referred to hospital or clinic	...	...	...	...	...	10
(b) Referred to family doctor only	...	...	...	...	...	21
(c) No action necessary	...	...	...	...	...	19
						—
TOTAL	...	...	...	...	...	50
						—

(7) RELAXATION CLASSES

Classes taken by physiotherapists at 12 centres, by midwives at 29 centres (this includes 1 also attended by a physiotherapist), and by health visitors at 2 centres.

Individual mothers attending	...	...	...	...	...	2,150
Sessions held (relaxation only)	...	...	...	...	...	1,741
Sessions held (relaxation combined with children's remedial exercises)	...	...	...	...	...	142
Attendances	...	...	...	...	...	12,553
Attendances at associated mothercraft classes	...	...	...	...	...	12,093

(8) WORK OF CHIROPODY CLINICS FOR ANTENATAL CASES

	1958	1957
Total number of sessions held	171	177
Total number of attendances	1,155	1,268
Average number of patients called per session	10	10
Average number of attendances per session	8	8

(9) ANALYSIS OF DOMICILIARY CONFINEMENTS ATTENDED BY MIDWIVES

	City Midwives	Private Midwives
1. (a) No. of cases where midwife was engaged and solely responsible	806	—
(b) No. of cases in 1 (a) where for some reason it was necessary to seek a doctor's assistance during labour	52	—
(Of these 52 cases the doctor was present at the actual delivery of the child in 12 instances, of which 2 were instrumental deliveries)		

	<i>City Midwives</i>	<i>Private Midwives</i>
2. (a) No. of cases where the doctor was booked for antenatal and postnatal care under the National Health Service and where the doctor had not expressed a wish to be present at the birth	5,147	2
(b) No. of cases in 2 (a) where for some reason it was necessary to seek a doctor's assistance during labour (Of these 382 cases, the doctor was present at the actual delivery of the child in 127 instances, of which 12 were instrumental deliveries)	382	—
3. No. of cases where the doctor, having undertaken antenatal and postnatal care, had expressed a desire to be notified of the onset of labour and his intention was to be present irrespective of whether that labour was likely to be normal or not (Of these 749 cases, the doctor was present at the actual delivery of the child in 479 instances, of which 10 were instrumental deliveries)	749	6
4. No. of cases where the doctor was privately booked to deliver the patient (Of these, the doctor was present at the actual delivery of the child in 5 cases.	8	4
5. No. of cases attended by ambulance midwives (Of these cases, 104 were booked for hospital, 41 were unbooked emergencies and 4 were booked for home confinement).	149	—

(10) REQUESTS FOR MEDICAL AID BY DOMICILIARY MIDWIVES,
ANALYSED BY CAUSE

	<i>Doctor booked for antenatal and Postnatal care</i>	<i>Midwife booked and solely responsible</i>
(a) Mothers		
1. Laceration of perineum ...	490	172
2. Difficult or prolonged labour	145	46
3. Puerperal pyrexia	107	45
4. Antepartum haemorrhage ...	92	28
5. Malpresentation	84	30
6. Premature labour	77	18
7. Foetal distress	71	22
8. Postpartum haemorrhage ...	51	19
9. Thrombosis of leg vein ...	38	20
10. Retained placenta	33	14
11. Other conditions	159	79
TOTAL	1,347	493

(b) Children				
1. Ophthalmia neonatorum	...	347		159
2. Unsatisfactory condition	...	63		29
3. Skin eruption	...	28		11
4. Other conditions	...	101		47
	TOTAL	539		246

(11) EMERGENCY MATERNITY SERVICE—AN ANALYSIS OF CASES

								1958
Postpartum haemorrhage with placenta retained	...	...	...	...	...	...	...	40
Postpartum haemorrhage with placenta expelled	...	...	...	...	...	...	...	25
Retained placenta	...	...	...	...	...	...	...	9
Haemorrhage and abortion	...	...	...	...	...	...	...	5
Eclampsia	...	...	...	...	...	...	...	2
Antepartum haemorrhage	...	...	...	...	...	...	...	2
Intrapartum haemorrhage during manual removal of placenta	...	...	...	...	...	...	...	1
Intrapartum haemorrhage before arrival of second twin	...	...	...	...	...	...	...	2
Obstetrical shock	...	...	...	...	...	...	...	1
								87

(12) ANALYSIS OF CAUSES OF PUERPERAL PYREXIA AND PUERPERAL SEPSIS

1. Due to conditions of genital tract	94
Uterine infection	...	...	...	...	...	...	...	77
Perineal infection	...	...	...	...	...	...	...	7
Retained products	...	...	...	...	...	...	...	5
Gonococcal infection	...	...	...	...	...	...	...	2
Ovarian abscess	...	...	...	...	...	...	...	1
Salpingitis	...	...	...	...	...	...	...	1
Vaginal trauma	...	...	...	...	...	...	...	1
2. Due to Caesarean Section	...	...	...	...	...	...	...	27
Reactive	...	...	...	...	...	...	...	18
Post-operative peritonitis	...	...	...	...	...	...	...	5
Haemoperitoneum	...	...	...	...	...	...	...	2
Infected wound	...	...	...	...	...	...	...	2
3. Due to extra-genital conditions	...	...	...	...	...	...	...	181
Mastitis	...	...	...	...	...	...	...	93
Urinary infection	...	...	...	...	...	...	...	38
Chest	...	...	...	...	...	...	...	22
Upper respiratory infection	...	...	...	...	...	...	...	13
Influenza	...	...	...	...	...	...	...	13
Thrombophlebitis	...	...	...	...	...	...	...	2
4. Cause not specified or unknown	...	...	...	...	...	...	...	68
5. Other conditions (<i>e.g.</i> malaria, glandular fever and reaction due to intravenous iron, etc.)	...	...	...	...	...	...	...	17
								387

Domiciliary Care of Premature Infants

When a woman goes into labour prematurely, the midwife who attends the confinement remains with the patient until labour is completed. A midwife who has been specially trained in the care of the premature infant then takes charge of mother and baby. A high proportion of premature infants born in hospital are transferred to the premature baby nurse on discharge. She visits as long as is necessary and then hands over the infant's supervision to the health visitor. Special cots, clothes, scales and other items are available for premature infants nursed at home.

The duties of the premature baby nurse are not confined to nursing technique as she explains the susceptibilities and needs of the premature infant. In this way the family is helped to understand the care of the premature baby and its special liability to infection.

Statistics

During the year 1958, there were 913 premature infants whose early care could be divided among several categories, and a total of 787 infants were cared for by the eight specially trained midwives.

CARE OF PREMATURE INFANTS

- 1. Home confinement and baby after-care at home ... 211

There were nine sets of twins and nine surviving babies of twin deliveries in this category.

The weight distributon was as follows :—

Under 3 lbs. 4 ozs.	...	...	...	...	...	0
3 lbs. 5 ozs.—4 lbs. 6 ozs.	...	...	...	...	...	5
4 lbs. 7 ozs.—4 lbs. 15 ozs.	...	...	...	...	...	38
5 lbs.—5 lbs. 8 ozs.	...	...	...	...	...	168
TOTAL						211

There were no neonatal deaths.

- 2. Home confinement, care by premature baby midwife, then either admission to hospital or admission to hospital with care by premature baby midwife on discharge ... 16

The weight distribution was as follows :—

Under 3 lbs. 4 ozs.	...	...	...	...	...	0
3 lbs. 5 ozs.—4 lbs. 6 ozs.	...	...	...	...	...	3
4 lbs. 7 ozs.—4 lbs. 15 ozs.	...	...	...	...	...	5
5 lbs.—5 lbs. 8 ozs.	...	...	...	...	...	8
TOTAL						16

There were three neonatal deaths due to broncho-pneumonia and operation for complete duodenal atresia, intestinal obstruction and meconium ileus, and bronchopneumonia.

Reasons for the removal of infants in this category to hospital included cyanosis, cold syndrome, low body temperature, jaundice, loss of weight, poor home conditions.

3. Home confinement, then either admission to hospital ; or admission to hospital with care by premature baby midwife on discharge 97

There were seven sets of twins and eight babies of twin deliveries.

The weight distribution was as follows :—

Under 3 lbs. 4 ozs.	17
3 lbs. 5 ozs.—4 lbs. 6 ozs... ..	46
4 lbs. 7 ozs.—4 lbs. 15 ozs.	17
5 lbs.—5 lbs. 8 ozs.	17
TOTAL	97

The time lapse before the infant's admission to hospital is of importance ; it varied as below :—

Under 2 hours	83
2 hours to 6 hours	11
6 hours to 24 hours	2
24 hours to 14th day	1
TOTAL	97

The principal reasons for admission to hospital were :—weight under 4 lbs. 8 ozs. (63), poor condition (11), unsuitable housing (8) and congenital deformities (3).

There were 24 neonatal deaths among the infants classified as follows :—

Hyaline membrane	5
Prematurity	6
Hydrocephalus with spina bifida	2
Atelectasis	2
Bronchopneumonia—prematurity	1
Bronchopneumonia, multiple congenital deformity	1
Mononuclear catarrhal pneumonia	1
Cerebral haemorrhage	2
Subarachnoid haemorrhage	1
Intracranial haemorrhage, hydronephrotic kidney	1
Pulmonary collapse ; intraventricular haemorrhage	1
Bilateral adrenal haemorrhage—adrenal agenesis	1

4. Home confinement, not transferred to premature baby midwife ... 47

The weight distribution was as follows :—

Under 3 lbs. 4 ozs. ...	1
3 lbs. 5 ozs.—4 lbs. 6 ozs. ...	0
4 lbs. 7 ozs.—4 lbs. 15 ozs. ...	1
5 lbs.—5 lbs. 8 ozs. ...	45
<hr/>	
TOTAL	47
<hr/>	

There were two neonatal deaths—one infant was under 2 lbs. in weight; the other died from prematurity and diaphragmatic hernia.

5. Hospital confinement, care by premature baby midwife on discharge ... 523
(plus cases born in 1957 and discharged 1958 ... 15)

There were 32 sets of twins, 37 surviving babies of twin deliveries, one set and three surviving babies of triplet deliveries.

There was one neonatal death; an infant discharged on the second day was home approximately eighteen hours before re-admission to hospital, where it soon died from haemorrhagic pneumonia.

6. Sixteen infants born in ambulance en route to hospital, of these there were seven neonatal deaths under four days and four subsequently discharged to premature baby midwife ... 4

TOTAL 913

FOLLOW-UP OF 1,288 PREMATURE INFANTS LIVE-BORN 1957
(PREPARED BY DR. V. M. CROSSE,)

<i>Birth weight group</i>	<i>Up to 2 lbs. 3 ozs. (1,000 g.)</i>	<i>Over 2 lbs. 3 ozs. up to 3 lbs. 4 ozs. (1,500 g.)</i>	<i>Over 3 lbs. 4 ozs. up to 4 lbs. 6 ozs. (2,000 g.)</i>	<i>Over 4 lbs. 6 ozs. up to 5 lbs. 8 ozs. (2,500 g.)</i>
Original number in each group	42	102	238	906
Neonatal deaths	39	65	62	49
Alive at 4 weeks	3	37	176	857
Died after 4 weeks and before 1 year	—	3	3	17
Left City or untraced	—	4	16	30
Followed to age of 1 year	3	30	157	810
Abnormalities found at 1 year	1 =33.3%	3 =10.0%	14 =8.9%	33 =4.1%
	1 Congenital heart	1 Squint 1 Hernia 1 Congenital heart	5 Squint 1 Deaf 1 Extra digit 2 Hernia 2 Talipes 1 Congenital heart 1 Microcephaly 1 Cerebral agenesis	5 Squint 1 Ptosis of eyelid 1 Deaf 9 Inguinal hernia 4 Talipes 1 Congenital heart 1 Fragilitas ossium 1 Slight hydrocephalic 1 Spastic 9 Mentally retarded (i.e. mongolian and microcephalic)

HEALTH VISITING

(SECTION 24—NATIONAL HEALTH SERVICE ACT, 1946)

General Consideration

The many aspects of the work of the health visitor are considered under other headings in this Annual Report and will not be duplicated here.

The Department employed the equivalent of 103 full-time health visitors (98 whole-time, and 12 part-time counted as equal to 5 whole-time visitors) in 1958, which is a slight reduction from 1957 when the equivalent of 106 whole-time were available.

Although her interests and responsibilities are widening every year, the health visitor is still primarily concerned with the young child, at least for the present, and there were 83,815 children under five years in 1958, giving a child case load per health visitor of 814, which is an increase of 32 on 1957. The wider obligations of health visitors are indicated in a table on Page 142 which shows the amount of visiting apart from maternal and child welfare matters.

The Work of the Health Visitors' Training Centre

(a) Health Visitors' Training Course :

The thirty-sixth course of training for the Health Visitors' Certificate of the Royal Society of Health commenced on the 1st September, 1958. The examination will take place in Birmingham in June, 1959.

The response to the advertisements for Birmingham assisted students showed an increase on the previous year. One hundred and two enquiries were received. Of the 49 completed applications received, one candidate did not have the necessary qualifications, three candidates withdrew, seven candidates were too late to be considered, one candidate failed to attend for the entrance examination, eight candidates failed the entrance examination, two candidates failed the Committee interview, two candidates transferred to other local authorities and 25 candidates were accepted for training.

Eight other local authorities submitted 18 candidates for training. The Birmingham Education Department sent two candidates and one independent candidate was accepted, making a total of 46 students.

Since the commencement of the course one Birmingham student has withdrawn following an illness.

(b) Training of Health-Visitor and District-Nurse Tutors :

In the early summer of 1958, the Royal College of Nursing held a series of conferences to consider the revision of their Senior Public Health Courses. The Deputy Medical Officer of Health and the Tutor to the Health Visitors' Training Course were invited to take part on three occasions. The result of these meetings was an outline of practical experience, designed to give the students a different " slant " on the more recent developments in the care of families with special problems.

Five health-visitor-tutor students and one district-nurse-tutor student came to Birmingham in December for three weeks of their course. They observed the services provided for the handicapped, residential homes for the aged, the Mental Health Service, arrangements for assisting problem families and the homeless and also the Council's slum clearance activities.

(c) Training of Student Nurses in Public Health :

During the year 1958, the training centre made arrangements for 136 lectures to be given to student nurses in the Birmingham hospitals.

These lectures are given by administrative medical officers in the Health and Education Departments, health visitors and public health inspectors.

Statistics

WORK OF HEALTH VISITOR (HOME VISITS)

(a) ROUTINE VISITS TO CHILDREN UNDER 5 YEARS

Primary visits	...	...	...	...	...	...	...	19,578
Routine visits—children 0 to 1	...	...	...	...	...	...	...	47,096
Routine visits—children 1 to 2	...	...	...	...	...	...	...	39,796
Routine visits—children 2 to 5	...	...	...	...	...	...	...	85,305

191,775

(b) SPECIAL VISITS TO CHILDREN UNDER 5 YEARS (ON ACCOUNT OF ILLNESS, SPECIAL ENQUIRIES, SUSPECTED CASES OF OPHTHALMIA NEONATORUM, NEGLECT, ETC.)

Children 0 to 1	...	...	...	...	...	...	...	8,738
Children 1 to 2	...	...	...	...	...	...	...	3,013
Children 2 to 5	...	...	...	...	...	...	...	4,603

(c) VISITS TO EXPECTANT MOTHERS

Antenatal first visits	...	...	...	...	...	...	...	3,093
Antenatal re-visits and antenatal special visits	...	...	...	...	...	...	...	2,526

(d) POSTNATAL VISITS, ETC.

Postnatal visits	...	...	...	...	...	...	...	356
Neonatal deaths	...	...	...	...	...	...	...	64
Stillbirths	...	...	...	...	...	...	...	102

(e) MISCELLANEOUS VISITS

Scabies	...	...	...	...	...	...	...	148
Domestic helps	...	...	...	...	...	...	...	63
Children of school age	...	...	...	...	...	...	...	857
Adults (other than antenatal and postnatal visits)	...	...	...	...	...	...	...	1,721
Old people (women 60+, men 65+)	...	...	...	...	...	...	...	1,292
To general practitioners	...	...	...	...	...	...	...	143
Re insanitary conditions	...	...	...	...	...	...	...	147
Housing	...	...	...	...	...	...	...	742
Tuberculosis follow-up survey	...	...	...	...	...	...	...	5,377

Grand Total of all visits ... 224,760

Total number of useless calls ... 45,697

HOME NURSING SERVICE

(SECTION 25—NATIONAL HEALTH SERVICE ACT, 1946)

There has been a slight decrease in the numbers of persons attended and of the total visits made in 1958 as compared with recent years. The case load and the average number of visits per year paid by each nurse remains high, as there has been a fall in the number of staff employed.

The number of tuberculosis cases attended was the lowest since the introduction of the Home Nursing Service in 1948. Other conditions, such as carcinoma and bronchitis, have continued their tendency of recent years to increase. Cardiac disease cases nursed have shown a marked fall since last year—a contradiction to the trend since 1950. Especially in the elderly it is difficult to say whether the heart or the lungs are primarily affected and the doubt in classification can produce misleading totals. In spite of diuretics, so often required for these patients, being now available for administration by mouth, the number of injections of diuretics fell very little. The surgical case load has fallen gradually over the past six years possibly because there are fewer ulcerating carcinomata, while infected skin and subcutaneous conditions now rarely require prolonged nursing care. The elderly chronic sick and the feeble aged, year by year, account for an increasing load of work on the Home Nursing Service.

Reorganisation of Home Nursing Service

The Service was organised locally from eleven District Nurses' Homes situated in various parts of the City. These originally functioned as residential district nurses' homes with the superintendent's office, a district room for servicing equipment and with storage space for loan equipment. For some time nurses have sought a more independent way of life and only a minority wished to live in the nurses' homes, thus residential accommodation became not fully used. After careful consideration, the homes at Aston, Hall Green, Saltley and Yardley, which especially lent themselves for the purpose, were converted into flats for the district superintendent and nurses and, in addition, a flat was provided for a caretaker. The administrative accommodation remained and was called a District Nursing Centre. This scheme is very successful, the nurses appreciating the opportunity of a more independent way of life which this accommodation allows.

In the Kingstanding area the nurses' home was a small private house which did not provide adequate facilities for the office and a district room. The centre was, therefore, removed to a group of four Corporation flats nearby which, besides suitable office accommodation and district room, provided flats for three nurses and also a welfare centre.

Accommodation was urgently required for a day nursery in the Bordesley area and the large district nurses' home in Moseley Road

**AREAS SERVED BY THE REORGANISED
HOME NURSING SERVICE , 1958.**



appeared very suitable. It was converted for this purpose with the addition of flats for two district nurses and a caretaker. An annexe, comprising offices and a district room to serve as the district nursing centre, was built on to the original building.

The four remaining district nurses' homes at Erdington, Handsworth, Kings Heath and Selly Oak were not suitable for conversion into flats and there did not appear to be a need to provide further accommodation for the district nurses. The Health Committee decided that they should be closed.

It was felt that eight district nursing centres should be sufficient to cover the City. The superintendents at Aston and Washwood Heath, who retired during the year, were not replaced by new appointees. The home at Erdington was closed and the superintendent transferred to Washwood Heath; the Erdington area being divided and served by the Aston and Washwood Heath District Nursing Centres. Similarly the Kings Heath home was closed and the superintendent transferred to Aston; the Kings Heath area was then amalgamated with the Hall Green area and served by the district nursing centre in Hall Green.

The superintendent of the Selly Oak centre resigned her post and, upon the closure of the Handsworth home, the superintendent was transferred to the Selly Oak area. The Handsworth area was then amalgamated with the district covered by the Central Training Centre in Summer Hill Road and an additional assistant superintendent was appointed to help in the administration of this large area.

Final arrangements for closing the nurses' home at Selly Oak have not yet been made.

This amalgamation of areas could have resulted in many nurses having to travel long distances to reach their district nursing centre. To avoid this difficulty, conveniently situated welfare centres were selected and arrangements made for the district nurses to telephone their area superintendent for messages regarding patients. At most welfare centres the district nurses were given a separate room for this purpose. Due to the co-operation of all concerned the new arrangements have worked very satisfactorily. The basing of district nurses on welfare centres has established a close liaison with health visitors and co-ordinated the public health nursing services.

Training of Student District Nurses

During the year 23 state registered nurses undertook the course of district training and took the examination for the Queen's Roll. All the students were successful, one obtaining a credit in the written examination.

Refresher Course

One superintendent attended a Civil Defence Course at the Staff College, Sunningdale, Berkshire, and two superintendents a course for district nursing administrators in London. An assistant superintendent participated in a course on "Posture and Lifting." Eight district nurses attended refresher courses in Cambridge, Exeter, London and Birmingham. Forty-five state enrolled assistant nurses enjoyed an excellent one day refresher course arranged by the staff of the Public Health Department. Of the 45 nurses who attended, 29 were working as district nurses in Birmingham and 16 came from neighbouring authorities. District nurses' meetings were held regularly throughout the year and lectures and demonstrations were given on subjects of special interest including the prevention and treatment of burns and a demonstration on newer types of nursing equipment and mechanical aids to lifting.

Student Nurses' Visits

Student nurses from nurse training schools in Birmingham spend either a day or a morning with a district nurse during their third year of training. Before the visits an experienced district nurse attends the hospital and gives the students a preparatory talk. She later meets the students again to hear their comments and to answer questions. The student nurse gains personal knowledge of the domiciliary nursing service and appreciates her own patient's background and the social environment to which he will return after discharge from hospital. During the year, 326 students accompanied the district nurses on their rounds.

X-ray of District Nursing Staff

At the beginning of the year the procedure for X-raying district nurses was amended, arrangements being made for those under 25 years of age to have a chest X-ray every six months and for others to be X-rayed annually. Fifty initial examinations of new entrants and 160 six-monthly and yearly re-examinations of present staff were made during the year. Ten nurses and bathing attendants received Mantoux tests and one nurse and two bathing attendants were vaccinated with B.C.G.

Bathing Attendants

Fifteen bathing attendants visited a total of 5,587 people and 19,931 baths were given.

Clinics for Ambulant Patients

Early in the year it was decided, as an experiment, to start clinics for ambulant patients in the Stirchley, Selly Oak and Weoley Castle areas based on welfare centres in these districts. A district nurse attended the clinics to carry out treatment. Doctors working in the locality were

invited to send patients to these centres. Since the commencement of the scheme in May until 31st December, 39 ambulant patients had received an aggregate of 669 treatments.

Health Education

The Home Nursing Service has co-operated fully in health education programmes. During the months of July and August nine male nurses had a course of in-service training in the Health Education Section. In 1958 a total of 486 instructions were given—285 in schools and 201 to other groups. During the national “Guard that fire” campaign in November, the home nurses were advised on measures necessary to make people aware of accidents due to burns and scalds; members of the staff gave instruction in the home and distributed leaflets in connection with the campaign.

Children's Home Nursing Service

Six hundred and forty-three children have been attended by the two nurses operating this service and 7,365 visits were paid. The nurse attached to the Bordesley District Nursing Centre attended 344 patients and paid 3,557 visits. The nurse working from the Central District Nursing Centre attended 299 patients and paid 3,808 visits.

The 628 new cases were in the following age groups :—

0—12 months	...	...	...	172
1— 5 years	...	...	...	281
6—14 years	...	...	...	175
				628

Of these, 598 were referred by general practitioners, 24 by hospitals and 6 by the Public Health Department.

Loan of Nursing Equipment (Sect. 28—N.H.S. Act)

The demands made on this service continue to grow and in the past year the number of items on loan was 9,346 as compared with 7,862, an increase of 18·9 per cent, over the previous year.

The amount contributed by patients as loan charges was £1,360 as against £1,232 in 1957.

Whilst there has been a general increase throughout the whole range of equipment, there has been a notable increase in :—

Bedsteads from	389 to 481;	an increase of 23·6 per cent.		
Special mattresses from	222 to 287	„	„	29·3 „
Fracture boards from	74 to 98	„	„	32·4 „
Lifting poles from	102 to 178	„	„	74·5 „
Walking aids from	208 to 301	„	„	44·7 „
Commodes from	773 to 1,060	„	„	37·1 „

The demand for the loan of commodes has shown an extraordinary increase over the past three years from 499 in 1955 to 1,060 this year or 112·4 per cent.

Whilst the vast majority of the commodes issued are of standard patterns, adaptations are sometimes required to meet the special needs of patients and these are carried out in our own Works Department or by the manufacturers.

The increase in wheel chairs of all types from 1,126 in 1957 to 1,206 in the past year related entirely to chairs for indoor use and mainly of the self-propelling type, but some new types of chairs have been added to our range which are specially suited for spastic patients.

The increase from 208 to 301 in the loan of walking aids is indicative of the valuable assistance these can be in the rehabilitation of patients and a close liaison is maintained with the hospitals to ensure continuity of supply of suitable aids to patients on discharge.

This also extends to other equipment required for the patient and, where there are special needs, there is frequent consultation with the hospital before the patient's discharge.

Loan of Fireguards (Sect. 28—N.H.S. Act)

The number of cases to whom fireguards were on loan during the year was 747, an increase of 20·87 per cent, as compared with the previous year, and after allowing for 150 returned as no longer required, there remained 597 still on loan at 31st December.

Since the inception of the scheme in 1953 the total number of fireguards issued on loan is 1,065, of which 468 have been returned as no longer required and, of these, 50 were condemned as being beyond economical repair. In the great majority of cases the fireguards are loaned free of charge but in about 12 per cent. of the cases a hire charge of 5/- a year is made though it is very difficult to collect this and in the past year about 50 per cent. of the cases liable for a hire charge defaulted.

Domiciliary Laundry Service (Sect. 28—N.H.S. Act)

The number of patients who received this service during the year was 670 as compared with 604 in the previous year and the number receiving the service at any one time varied between 178 and 213.

This service is available only in cases where the medical condition of the patient necessitates the use of abnormal quantities of bed linen. The linen, which may include blankets, sheets, draw sheets and pillow cases, is supplied on loan and laundered at the Public Health Department's laundry at Bacchus Road. Collections and deliveries are made once or twice weekly according to the needs of the particular case and the number of items provided varies accordingly.

A charge is made based upon the patient's circumstances. This charge, which had been from 3d. to 3/- per bundle laundered, was reviewed in the early part of the year and the maximum charge of 3/- was increased to 5/- per bundle laundered from 1st April.

Under the old scale the maximum charge of 3/- applied to cases where the family weekly income exceeded 70/- per head after deduction for rent up to 20/- per week, but under the new scale the maximum charge of 5/- applies only where the family weekly income exceeds 110/- per head after deduction for rent up to 20/- per week.

In the previous year, out of a total of 604 cases the number to whom the maximum charge of 3/- applied was 204 but in the year under review the number to whom the new maximum of 5/- applied during the last nine months was 105 out of a total of 510.

In a few cases some resentment was expressed at the increased charge but when the reasons for this were explained this was accepted and there has been no evidence to suggest that the revision has caused any hardship.

The amount contributed by patients was £1,710 as compared with £1,336 in the previous year.

The number of articles laundered was 145,400, an increase of 11 per cent. over the previous year and the total weight of soiled linen handled was nearly 68½ tons.

Statistics

(1) STAFF OF HOME NURSING SERVICE							
Senior Superintendent...	...	...	...	...	...	...	1
District Superintendents	...	...	...	...	...	...	7
District Nurse Tutor ...	...	...	...	...	...	...	1
Assistant Superintendents	...	...	...	...	...	...	2
Full time District Nurses	...	...	...	...	...	...	156
Part-time District Nurses	...	...	...	...	...	...	24
TOTAL ...							191

The staff includes 14 male nurses and 7 student district nurses.

(2) STUDENT NURSES—VISITS ARRANGED WITH HOME NURSING SERVICE			
<i>Students</i>		<i>No. of groups during year</i>	<i>Total No. of Students</i>
General Hospital Nurses	...	6	74
Dudley Road Hospital Nurses	...	4	62
Queen Elizabeth Hospital Nurses	...	7	144
Children's Hospital Nurses	...	2	22
Accident Hospital Nurses	...	9	24
		28	326

(3) CASES NURSED BY THE HOME NURSING SERVICE

(1) *Number of cases attended*

Cases on books, 1st January, 1958	...	...	...	...	...	...	4,073
New cases attended	...	...	...	...	...	...	16,798
Total cases attended	...	...	...	...	...	...	20,871
Total visits paid	...	...	...	...	...	...	664,036

(2) *Age groups of cases on books on 1st January, 1958*

Under 5 years	...	...	...	...	...	...	39
5—14 years	...	...	...	...	...	...	46
15—64 years	...	...	...	...	...	...	1,325
65 years and over	...	...	...	...	...	...	2,678

(3) *Age groups of new cases*

Under 5 years	...	...	...	...	...	...	1,324
5—14 years	...	...	...	...	...	...	914
15—64 years	...	...	...	...	...	...	7,155
65 years and over	...	...	...	...	...	...	7,445

(4) *Cases referred by :—*

General practitioners	...	...	...	...	...	...	15,660
Hospitals	...	...	...	...	...	...	714
Health Department	...	...	...	...	...	...	151
Transferred from other areas	...	...	...	...	...	...	238
Other sources	...	...	...	...	...	...	35

(4) CLASSIFICATION, BY DISEASE OR DISORDER, OF NEW CASES DEALT WITH BY THE HOME NURSING SERVICE

(a) *Medical*

Cardiac	...	...	...	...	...	...	1,627
Pneumonia	...	...	...	...	...	...	824
Bronchitis	...	...	...	...	...	...	2,018
Diabetes	...	...	...	...	...	...	450
Arthritis	...	...	...	...	...	...	294
Carcinoma	...	...	...	...	...	...	1,058
Senility	...	...	...	...	...	...	958
Strokes	...	...	...	...	...	...	869
Enemata	...	...	...	...	...	...	1,880
Others	...	...	...	...	...	...	3,761

(b) *Infectious diseases*

Tuberculosis	...	...	...	...	...	...	316
Whooping cough	...	...	...	...	...	...	18
Measles	...	...	...	...	...	...	19
Pemphigus	...	...	...	...	...	...	0
Influenza	...	...	...	...	...	...	90
Other	...	...	...	...	...	...	8

(c) *Midwifery and Gynaecology*

Puerperal fever	...	...	...	...	...	...	6
Antenatal complications	...	...	...	...	...	...	31
Postnatal complications	...	...	...	...	...	...	65
Abortion	...	...	...	...	...	...	17
Pessary renewals	...	...	...	...	...	...	93

(d) *Surgical*

Post operation	556
Operations, other than hospital	13
Ulceration of legs	301
Other dressings... ..	1,526

(5) NEW CASES VISITED, ACCORDING TO DISEASE OR DISORDER, BY
CHILDREN'S HOME NURSING SERVICE

Bronchitis, pneumonia, pleural effusion	305
Tonsillitis, otitis media, adenitis	141
Abscesses, boils and other skin conditions	36
Gastro-intestinal conditions, including enemata given	69
Infectious diseases	21
Diseases of the central nervous system	8
Disease of kidney	1
Diabetes mellitus	1
Rheumatism	2
Pyrexia	12
Other medical	13
Post operative conditions	9
Orthopaedic conditions	2
Eye conditions	2
Burns and scalds	6
	<hr/> 628 <hr/>

(6) LOAN OF HOME NURSING EQUIPMENT 1956—1958

(1) *Amounts of special equipment on loan during each of the past three years*

	1956	1957	1958
Wheel chairs	867	930	927
Merlin chairs	170	159	222
Stairway chairs	22	28	55
Spinal carriages	8	9	2
Bedsteads	318	389	481
Special mattresses	182	222	287
Fracture boards	50	74	98
Lifting poles and chains	91	102	178
Self-operating tilting beds	4	4	4
Crutches, pairs	51	46	56
Walking sticks	99	141	208
Walking machines	19	21	37
Lifting apparatus	46	19	23
	<hr/> 1,927 <hr/>	<hr/> 2,144 <hr/>	<hr/> 2,578 <hr/>

(2) *Amounts of normal sick-room equipment on loan*

	1956	1957	1958
Air beds	39	32	34
Air rings and sorbo cushions	1,034	898	993
Back rests	613	665	779
Bedpans... ..	1,269	1,293	1,382
Leg cradles	260	245	303
Mackintosh sheets	1,230	1,093	1,371
Urinals	589	548	582
Sick feeders	83	48	90
Commodes	635	773	1,060
Bed chairs	8	9	11
Miscellaneous items	134	114	163
	<u>5,894</u>	<u>5,718</u>	<u>6,768</u>

(7) LOAN OF FIREGUARDS, 1956—1958

	1956	1957	1958
Number of fireguards on loan,			
1st January	272	377	497
Number issued during year	207	241	250
	<u>479</u>	<u>618</u>	<u>747</u>
Number returned, no longer required	102	121	150
	<u>377</u>	<u>497</u>	<u>597</u>
Amounts collected from hire charges	£6 1 0	£9 8 6	£11 13 6

(8) WORK OF THE DOMICILIARY LAUNDRY SERVICE, 1958

(1) *Case Load of Domiciliary Laundry Service*

	1958
Number of cases on books, 1st January	190
New applications during year	480
	<u>670</u>
Cases removed from books during year	457
Cases still on books at 31st December	213

(2) *Analysis of Cases*

1958 Quarter ending	No. of approved appli- cations	Service discontinued			Service not started			Total
		Died	Hosp.	Other reasons	Died	Hosp.	Other reasons	
31 Mar	168	79	44	27	7	3	—	160
30 Jun	93	49	33	13	4	—	1	100
30 Sep	80	57	26	9	1	—	—	93
31 Dec	139	56	21	17	8	1	1	104
	480	241	124	66	20	4	2	457

AMBULANCE SERVICE

(SECTION 27—NATIONAL HEALTH SERVICE ACT, 1946)

The grand total of patients conveyed by the Ambulance Service during 1958, excluding patients carried on behalf of the Service by the Hospital Car Service, was 355,767, an increase of 10,939 on the figure of 344,828 for 1957.

Whilst there was an increase in the number of casualties conveyed by the Accident Section of the Service, the total increase in patients carried was almost wholly borne by the Hospital Removal Section. It is of interest that, although in recent years there has been reason to suppose that the demands on this section of the Service were levelling off, current indications are that the demand will continue to increase. This trend is illustrated by the following table which shows the number of patients conveyed by the Hospital Removal Section during the past four years.

Year	<i>Patients conveyed by</i>			<i>Comparison with previous years</i>	
	<i>Hospital Removal Service</i>			<i>Increase</i>	<i>Decrease</i>
1955	328,561	1,590	—
1956	330,416	1,855	—
1957	330,252	—	164
1958	340,762	10,510	—

Detailed statistics under various classifications are shown in the following table, which also gives comparative figures for the past five years.

HOSPITAL REMOVAL AMBULANCES COMPARATIVE ANNUAL TOTALS OF CASES CARRIED ACCORDING TO CLASSIFICATION

<i>Analysis of Cases</i>		1954	1955	1956	1957	1958
Out- posted Units	Clinic cases ...	226,473	227,744	234,939	237,129	250,470
	Admissions ...	27,413	28,528	27,362	27,968	27,873
	Discharges ...	35,150	35,438	33,766	33,982	32,960
	Transfers ...	9,382	9,940	9,621	9,228	7,935
	Emergency					
	Maternity Service	134	93	110	114	104
	Maternity ...	7,965	7,627	8,320	8,164	8,428
	Monyhull—Mental	1,001	1,109	1,337	1,239	1,155
	Little Bromwich					
	Infectious ...	1,612	1,822	1,563	1,898	1,612
	Yardley Green—					
	Tuberculosis ...	16,266	14,693	11,902	8,984	8,797
	Miscellaneous ...	1,575	1,567	1,496	1,546	1,428
TOTALS ...		326,971	328,561	330,416	330,252	340,762

TOTAL NUMBER OF PATIENTS DIVIDED INTO STRETCHER AND
• SITTING CASES

			1954	1955	1956	1957	1958
Stretcher cases	...	...	66,371	73,492	74,886	75,561	77,432
Sitting cases	...	...	260,600	255,069	255,530	254,691	263,330
TOTALS	...	...	326,971	328,561	330,416	330,252	340,762

There was a slight increase in the proportion of sitting cases to stretcher cases which is a reversal of the trend over recent years. This is illustrated in the following table :—

RATIO OF SITTING TO STRETCHER CASES

1955	...	...	3.47	: 1
1956	...	...	3.41	: 1
1957	...	...	3.37	: 1
1958	...	...	3.40	: 1

Principal variations in the classified analysis occurred as follows :—

<i>Increases</i>	Clinic cases (all forms of out-patient treatment)	...	13,341
	Maternity cases (including E.M.S.)	...	254
<i>Decreases</i>	Infectious and Tuberculosis Units	...	473

Accident Ambulances

Accident ambulance cover was maintained during the year by nine ambulances operating from eight selected fire stations, additional cover for special occasions being again provided by crews of the Hospital Removal Section and the St. John Ambulance Brigade. There was again an increase in the number of calls and casualties carried by the Accident Section, the comparative figures being as follows :—

							1957	1958
Calls	...	...	...	...	...	...	15,223	15,629
Casualties	...	...	...	...	...	...	14,576	15,005

Under mutual assistance arrangements with neighbouring authorities, the Service provided accident ambulances in response to 7 incidents outside the City boundary—13 less than in the previous year. In accordance with agreements made with other local health authorities, this assistance was provided on a non-chargeable basis.

A detailed analysis of location of calls, classified injuries, hospitals to which casualties were conveyed and the number of fatalities, with comparative figures for the previous year, is shown in the following tables :—

TABLE SHOWING NUMBER OF PERSONS OF VARIOUS AGE GROUPS CARRIED IN ACCIDENT AMBULANCES
DURING EACH HOUR OF THE DAY

Age Group	HOURS OF THE DAY																							Total	
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23		23-24
5 and under	13	6	11	5	2	8	8	9	31	34	70	84	101	88	86	117	128	98	91	63	46	31	26	24	1,180
6-10	6	1	2	4	1	2	—	5	29	28	63	64	95	116	73	94	127	114	89	81	47	38	19	18	1,116
11-15	10	5	2	2	2	1	1	14	38	45	69	99	105	130	93	113	137	108	84	71	83	54	37	16	1,319
16-20	46	19	7	7	7	2	10	35	71	44	58	74	71	71	70	90	91	107	99	75	74	95	139	127	1,489
21-25	81	34	21	16	8	5	11	42	53	35	42	54	77	74	69	75	55	77	66	74	69	60	127	136	1,361
26-30	64	20	30	13	5	2	11	37	42	35	49	70	51	42	58	80	50	56	56	61	50	59	112	105	1,158
31-35	47	15	8	13	7	7	8	22	36	34	34	53	46	59	53	64	48	55	39	38	42	51	86	86	951
36-40	48	20	17	4	5	7	5	27	24	30	41	41	37	36	41	58	40	48	46	40	29	43	81	80	848
41-45	26	9	12	5	3	8	9	29	22	42	36	43	43	33	46	57	49	52	31	36	34	29	76	52	782
46-50	25	8	13	6	4	9	16	36	39	37	52	53	60	59	45	61	50	43	53	38	37	43	73	62	922
51-55	21	8	8	4	4	4	10	20	30	33	38	44	47	47	48	48	38	44	40	35	28	28	56	59	742
56-60	22	6	7	4	2	4	11	18	41	23	39	48	60	39	42	43	34	54	32	30	30	32	60	29	710
61-65	10	8	1	—	3	5	3	16	23	25	36	34	53	37	35	38	36	41	38	27	18	22	44	21	574
66-70	4	4	3	1	2	2	7	17	16	33	31	37	46	34	40	33	19	38	26	27	23	40	40	25	548
Over 70	19	7	11	9	6	7	3	17	29	53	54	107	133	102	93	96	90	82	72	56	46	56	64	29	1,241
Unknown Age	1	—	1	3	—	—	1	3	3	1	1	5	5	4	1	4	4	2	5	2	3	3	9	3	64
TOTAL	443	170	154	96	61	73	114	347	527	532	713	910	1030	971	893	1071	996	1019	867	754	659	684	1049	872	15,005

ACCIDENT AMBULANCE CALLS

LOCATION OF ACCIDENTS

	<i>1957</i>	<i>1958</i>
Street accidents involving vehicles	3,561	3,809
Factory accidents	816	781
Private houses	4,574	4,692
Offices	43	40
Shops and restaurants... ..	399	452
Outdoor (other than street accidents)	3,794	3,884
Licensed premises	300	278
Schools	382	361
Cinemas and theatres	133	133
Other premises	1,165	1,167
False alarms (malicious)	56	32
TOTAL	<u>15,223</u>	<u>15,629</u>

CLASSIFICATION OF INJURIES TO PATIENTS CARRIED IN AMBULANCES

	<i>1957</i>	<i>1958</i>
Fractures	2,069	2,037
Wounds	3,301	3,317
Collapse, fits, strokes	3,085	2,963
Abrasions and bruises	602	753
Gas poisoning	105	127
Drowning	2	2
Eye injuries	65	64
Dislocations and sprains	407	367
Hanging... ..	2	2
Concussion, shock	866	990
Haemorrhage	397	352
Scalds and burns	426	528
Poisoning	360	404
Not classified	2,889	3,099
TOTAL	<u>14,576</u>	<u>15,005</u>

DESTINATION OF CASUALTIES

	<i>1957</i>	<i>1958</i>
Accident Hospital	4,503	4,561
General Hospital	6,233	6,313
Other Hospitals	3,764	4,039
Casualties actually carried in ambulances but not taken to hospital... ..	76	92
TOTAL	<u>14,576</u>	<u>15,005</u>

FATALITIES

	1957	1958
Number of persons found dead on arrival of ambulances	215	182

METHOD OF TRANSMISSION OF CALLS

G.P.O. " 999 " system	...	...	...	...	...	...	10,329
Police Information Room	...	...	...	...	...	...	2,507
Exchange telephone	...	...	...	...	...	...	2,193
Private wire telephones	...	...	...	...	...	...	140
Street fire alarms	...	...	...	...	...	...	15
Messenger	...	...	...	...	...	...	361
Radio	...	...	...	...	...	...	60
Observed by ambulance crew	...	...	...	...	...	...	24
						TOTAL	15,629

Radio

Further benefits have been derived from the installation of short wave radio as experience of its operation on ambulances has been gained. Following the substantial reduction in mileage obtained in the previous year, which was the first full year's working of the radio scheme, a further reduction in mileage was obtained in the year under review, despite a substantial increase in the number of patients carried.

Outposted Ambulances

Arrangements whereby ambulances are operated as a detached unit at Little Bromwich and Yardley Green Hospitals were continued during the year. These ambulances convey patients suffering from infectious diseases at these and associated hospitals. It will be noted from the comparative analysis table on a previous page that there was a continued decline in the number of tuberculosis cases carried, although this decline was not so marked as in previous years.

There was a further decrease in the number of patients conveyed by the outposted ambulance at Monyhull Hall Hospital, dealing with patients for that hospital and associated mental hospitals, the figure being 1,155 as compared with 1,239 in 1957.

Ambulance Fleet

Despite the increased demand on the Service it was possible to maintain the strength of the ambulance fleet at the same level, viz :—

Dual purpose (stretcher) ambulances	...	...	...	...	72
Sitting case ambulances	...	...	...	...	27
Sitting case cars	...	...	...	...	3
Ambulance coach (20 seater)	...	...	...	...	1
					103

Conveyance of Patients by Rail

The number of cases transported on the ambulance/rail/ambulance basis was 1,076, as compared with 899 in 1957. This method of conveyance over medium or long distances has many advantages and its use has been constantly urged. Some limitation is imposed, however, by the recent development of diesel trains on a number of routes since stretcher cases cannot be carried on diesel trains, which are designed to give the maximum passenger capacity and thus afford no privacy or stretcher accommodation.

Birmingham Fire and Ambulance Service ambulances were provided at the request of other local health authorities to meet trains at the City railway stations and transport some 558 patients either to final destinations or to other railway stations to continue journeys.

Mutual Assistance

The following table shows cases conveyed over-the-border by ambulances of the Hospital Removal Section in continuance of mutual assistance arrangements designed to secure economy in the use of ambulances. Over-the-border accident calls are referred to in a previous paragraph.

	1957	1958
Patients conveyed from outside to places inside the City	20,216	22,852
Patients conveyed by ambulance to places outside the City	20,438	23,209

These figures show an increase over those for the previous year and include 273 patients conveyed on a chargeable basis for other local health authorities.

Maternity Services (including Emergency Maternity Service)

The number of maternity cases conveyed from home addresses to the various maternity hospitals increased during the year, the total being 8,428 as against 8,164 the previous year. The Ambulance Midwives provided by the Service to accompany these cases were required to give professional attention in 152 cases made up as follows :—

Delivery at home prior to removal by ambulance	100
Delivery in ambulance en route to hospital	27
Cases where attention was given to the needs of mother and baby when delivery occurred prior to ambulance call or attendance	25

There was a slight decrease in the number of calls for ambulances for the Emergency Maternity Service operated by Loveday Street Maternity Hospital during 1958, calls totalling 106 as against 114 the previous year. This transport is provided by the Service on a chargeable basis.

Marston Green Maternity Hospital

The provision of an additional clinic at the Hospital at the beginning of the year accounts largely for the sharp increase in the number of cases carried by the ambulance coach to and from the Hospital for outpatient treatment, some 34,305 cases being conveyed, representing an increase of 6,012 cases on the previous year.

Re-assessment of the work and subsequent revision of the ambulance coach schedule led to a reduction in waiting time of these patients, the additional load being carried without additional transport and with no increase in mileage.

Day Hospitals

The Service continued to co-operate in the day clinic experiment at Highcroft Mental Hospital by conveying certain selected patients to the Hospital each morning and returning them to the care of relatives in the evening. A few patients were also carried on this basis to and from Summerfield Hospital, it being understood that such patients form the nucleus of a similar experiment there.

Mileage

The following table shows the division of mileage into three sections of the Service over the past five years. Whilst the mileage of Accident Ambulances increased with the additional accident calls, the mileage of the Hospital Removal Ambulances again decreased despite the substantial increase in cases carried referred to earlier.

	1954	1955	1956	1957	1958
Hospital Removal					
Ambulances ...	1,553,092	1,577,312	1,581,413	1,531,445	1,525,666
Accident Ambulances ...	104,950	109,966	96,712	103,615	107,495
Outposted Ambulances ...	105,460	105,019	110,609	95,229	96,288
	<u>1,763,502</u>	<u>1,792,297</u>	<u>1,788,734</u>	<u>1,730,289</u>	<u>1,729,449</u>

With regard to Hospital Removal and Outposted Ambulances, the mileage trend compared with cases carried is illustrated in the following table :—

HOSPITAL REMOVAL AND OUTPOSTED AMBULANCES MONTHLY AVERAGE OF CASES CARRIED AND MILEAGE RUN

Year	Cases Carried Monthly Average	Mileage Monthly Average
1954 ...	27,248	138,213
1955 ...	27,379	140,194
1956 ...	27,535	141,001
1957 ...	27,521	135,556
1958 ...	28,397	135,163

It will be seen that whilst the number of cases carried increases, mileage continues to decrease. The use of radio, continued organisational improvements and hospital liaison, designed to ensure better co-ordination of journeys, have all contributed to this.

Staff

There was one promotion during the year, that of a Control Operative to Leading Control Operative.

Details of the establishment and strength of the Ambulance Service at the end of 1958 are as follows :—

					Strength at 31.12.58			
Operational and Depot Staff					Establishment	Men	Women	Total
Ambulance Officer	...	...	...	1	1	—	1
Depot Superintendent	...	...	...	1	1	—	1
Hospital Liaison Officer	...	...	...	1	1	—	1
Deputy Depot Superintendent	...	...	...	1	1	—	1
Traffic Controllers...	...	...	...	10	9	—	9
Clerks	...	...	...	5	2	3	5
Storekeeper	...	...	...	1	1	—	1
Depot Drivers	...	...	...	3	3	—	3
Depot Assistants	...	...	...	4	4	—	4
Ambulance Cleaners	...	...	...	12	7	—	7
Cooks and Cleaners	...	...	...	5	—	7†	7
Leading Drivers	...	...	...	10	10	1	11
Drivers and Attendants	...	...	...	168	133	17	150
Midwives	...	...	...	12	—	12*	12
Ambulance Control								
Control Duty Officer	...	...	...	1	1	—	1
Traffic Controllers	...	...	...	6	5	—	5
Leading Control Operatives	...	...	...	4	—	4	4
Control Operatives	...	...	...	23	1	21	22
					268	180	65	245

† Includes 5 part-time.

* Includes 4 part-time.

Bed Bureau

There was a slight decrease in the number of requests placed with the Emergency Bed Bureau, which is operated by the Ambulance Service on behalf of the Birmingham Regional Hospital Board. 13,045 requests were received from general practitioners, etc., beds being obtained in 12,414 of these cases. The figures for the previous year were 13,097 requests, beds being obtained in 12,486 cases.

Voluntary Services

The Service is again indebted to those voluntary members of the St. John Ambulance Brigade, the British Red Cross and the Women's Voluntary Service, who continued to assist the Service by acting as escorts for patients being conveyed by rail.

HOSPITAL CAR SERVICE

A valuable contribution to the work of the Ambulance Service was again made by members of the British Red Cross—Hospital Car Service. The total number of cases carried by the Hospital Car Service, which are not included in the Ambulance Service figures, again decreased slightly whilst the mileage again decreased substantially, as illustrated in the following table.

							1957	1958
Patients	...	...	...	...	...	...	13,241	13,153
Mileage	...	...	...	...	...	...	104,702	99,795

ST. JOHN AMBULANCE BRIGADE

Valuable assistance was again received from this Organisation whose members continued to man ambulances during the evenings and weekends, and to provide additional cover on special occasions.

PREVENTION OF ILLNESS CARE AND AFTER-CARE

(SECTION 28—NATIONAL HEALTH SERVICE ACT, 1946)

CARE OF THE AGED BY HEALTH VISITORS

The year 1958 presented this section of the Department with the inevitable problems associated with care of the aged. There was an increase both in the number of new cases referred and also in the number of visits paid to elderly people by the three health visitors who specialise in caring for the aged. A total of 8,774 visits was made, including visits to 1,394 new cases. In addition, 1,292 visits were made by the district health visitors to aged persons.

Of the new cases visited, 75·5 per cent. were women, a decrease on last year's proportion. As in previous years, the larger proportion were in the 75—85 age group ; of whom 37 per cent. lived alone, 30 per cent. lived with relatives and 24 per cent. with their spouse ; 60 per cent. were widowed, 27·2 per cent. married and 12·8 per cent. single. There were fewer bedridden cases to deal with this year, 7·6 per cent. as compared with 9·2 per cent. in 1957. The proportion of incontinent patients was 5·4 per cent.

As the proportion of elderly people in the population increases, so the work of the Public Health Department in this connection becomes heavier, and it is of the utmost importance that work in this field should be closely integrated with that of voluntary organisations and other statutory services. Birmingham is fortunate in having a very close liaison with both the Birmingham Council for Old People and the Birmingham Council of Social Service. These voluntary organisations are most helpful, and many of our problems could not be solved without their ready co-operation. Particular mention should be made of their voluntary visiting service, which enables so many elderly people living alone to have the constant help and surveillance essential if they are to continue living happily in their own homes. The aim of all services working in this field is to encourage as many of the elderly as possible to manage their own affairs, if necessary with help from the various departments, and not to remove responsibility either from them or their relatives.

Many elderly people are receiving excellent help from their relatives, often at great hardship both in regard to finance and accommodation, and there are still numerous instances where these relatives have not been able to have a holiday for several years because of the impossibility of making satisfactory arrangements for the care of the elderly persons, even for a short period.

Successful efforts are now being made to remedy this situation, the hospitals being prepared to accept patients for a short stay and the Welfare Department having a similar scheme. In view of the need to book

holiday accommodation early in the year, the Welfare Department will also accept a simultaneous booking for the accommodation of an elderly person from the household. A voluntary organisation also assists in this work of providing accommodation for the frail elderly.

A medical officer and the three specialist health visitors work in close association with hospitals, the City Welfare Department and with voluntary organisations, especially the Birmingham Council for Old People, and refer appropriately those requiring hospital admission or assistance not available from the Health Department. They will also arrange for home nursing, home help, disinfestation, removal of unwanted belongings, etc.—services provided by other sections of the Health Department. Conversely, problems affecting old people which are addressed direct to other sections of the Department, housing difficulties for instance, are often, in the first instance, referred to the health visitors who deal solely with the elderly, as they may have a good deal of information already.

From time to time general practitioners recommend for convalescence elderly people who, although not recovering from illness, need a change of environment to prevent a breakdown in health. Such a preventive outlook is welcomed and this convalescence is the means of relieving relatives who can then take a holiday themselves.

It is encouraging to find that the spirit of neighbourliness still exists, and this is especially so in the central areas of the City, where strong inter-family links stem from life-long friendship. Elderly people living on new estates often complain of loneliness; rehoused from central areas where they have lived for many years as an integral part of the community, they find it difficult to settle down and to make new friends. The role of the voluntary visitors in these outlying areas is extremely important, for it is by their regular visiting that the elderly can be encouraged to take an interest in district activities and to maintain contact with the various organisations which contribute to the welfare of the elderly.

The hard core of our work remains the domiciliary care of the elderly living alone. Many such persons have lived in the same house for most of their lives, surrounded by relics of earlier, happier years. Such relics are often in a state of dilapidation and disrepair, but are, nevertheless, treasured links with the past. Hoarding is instinctive with many women, particularly when they live alone, and some homes contain a fantastic collection of personal treasures and household goods, including tins and packets of food bought many years ago and either forgotten or saved for some improbable "emergency."

The problem of the unlighted gas tap is still unsolved and several tragedies occurred during the year. The sense of smell often diminishes with advancing age and may be lost altogether. This fact, together with

the frequency with which old people forget to light the gas after turning on the tap, may explain many accidents both fatal and otherwise. Details of elderly persons living alone are supplied to the Gas Undertaking in order that any defects in piping or appliances can be rectified.

The bathing of elderly people at the Health Department's cleansing station, instituted as a regular service in July, 1955, continues to be both popular and valuable. The total number of baths given during the year was 956, and 91 individual old people received benefit from the service (36 men and 55 women) ; 53 were new cases.

Towards the end of 1957 the Health Committee received a generous offer of £100 from the Eric W. Vincent Trust Fund, to be used for chiropody treatment of the elderly. Arrangements were made for one chiropody session to be held weekly at one or other welfare centre in the City and the Department's part-time chiropodist carried out this service. Eight welfare centres are used for this purpose and a rota system allows one session to be held at each centre every two months. An average of six elderly people are booked at each clinic. The cases receiving treatment are persons unable to attend a chiropodist's surgery, but who are not sufficiently infirm to require domiciliary treatment. The departmental car, which takes old people to the baths, is also used for this purpose. During the year 42 sessions have been held and 215 attendances made. Seventy-five individual cases have received treatment. A majority require treatment at least every two months and the turnover is, therefore, limited. This chiropody service is much appreciated by all who are receiving treatment and we are very grateful to the Eric Vincent Trust for their generosity. This service augments to a slight degree one already provided by the Birmingham Council for Old People, whose case-load continues to increase as the facilities become more widely known.

Cases on register on 1st January, 1958	...	...	...	...	1,641
New cases added during year	...	...	...	...	1,394
Cases remaining on register at end of year	...	...	...	...	2,084
Cases supplied with nursing equipment	...	...	...	...	245
Cases supplied with bath attendant	...	...	...	...	131
Cases supplied with laundry service at request of health visitor	...	...	...	...	45
Cases admitted to hospital	...	...	...	...	624
Old cases discharged from hospital	...	...	...	...	141
Deaths	...	...	...	...	456
Cases referred to Welfare Department	...	...	...	...	36
Total visits paid by special health visitors	...	...	...	...	8,774
Total visits paid by health visitors on general duties	...	...	...	...	1,292

HOSPITAL FOLLOW-UP WORK BY HEALTH VISITORS

In 1958, 740 sessions at hospital and 703 home visiting sessions, in all adding up to 3,056 visits to patients' homes, were made by hospital follow-up health visitors.

The hospital sessions comprise consultations with the various members of the hospital staff ; consultants, ward sisters, physiotherapists, psychiatric social workers and almoners, and with the patients themselves. As a representative of the Health Department, the health visitor is able to further the co-operation between the two services. Home visits entail discussions of an advisory nature with both patients and responsible relatives, investigations into housing conditions, and complete liaison with home nursing, social, welfare and voluntary services.

The value of the work undertaken by health visitors in assisting in the rehabilitation and resettlement of hospital patients is proved by the increasing demands from the hospital staff and the wide variety of home visits made by the visitors afford great opportunities for health teaching.

The nature of the work varies with each hospital, as will be seen by the following extracts taken from the health visitors' reports.

ACCIDENT HOSPITAL

The number of children and adults admitted to the Burns Unit remains at a high level. Children under five years and aged persons are particularly prone to accidents in the home and a large number of school children sustained burns of varying degree on November 5th.

During the past year continued efforts have been made to educate relatives of patients in the need for safety measures and in techniques of nursing burns and scalds in the home. Emotional stress has been a common feature of cases and close co-operation with the psychiatric social worker attached to the Unit was essential. Overcrowding and bad housing conditions were often the cause of prolonged separation of mothers and children, and in many instances, in homes lacking facilities for nursing, periods of convalescent care were arranged.

An increased number of visits was made to the homes of the injured aged (females over 65 years of age). In their anxiety to return home, many of these patients were unwilling to disclose relevant problems, whilst friends or relatives needed reassurance to enable them to overcome their individual difficulties.

CHILDREN'S HOSPITAL

The pattern of the work has changed considerably during the past twelve months. In addition to the Professorial Unit, visits have been requested by all the consultants and by the Out-patient, Casualty and Physiotherapy Departments. More attention has been paid to the child's psychological background, particularly in children suffering from chorea, encopresis, enuresis, asthma and epilepsy, etc.

Home visits were the means of providing a detailed picture of the child's environment, including parental and sibling relationships. In children of school age, the opinion of the head or form master proved to be valuable. Other visits were made on account of general neglect or to

ascertain the cause of defaulting from treatment and, if necessary, to arrange for escort by a member of the Women's Voluntary Service.

DUDLEY ROAD HOSPITAL

The follow-up work at this hospital is concerned with children suffering from various illnesses of which respiratory diseases form the larger proportion. Information was obtained regarding housing, heating and type of locality, for research which is being conducted at the hospitals into causes of bronchiolitis in children.

Feeding problems are often also a cause for concern.

GENERAL HOSPITAL DIABETIC CLINIC

During 1958 an average of twenty new diabetic cases per week were diagnosed. These patients are divided into two groups, i.e., the young persons usually requiring insulin, and the elderly persons whose condition may be controlled either by diet alone, or by diet and medicine, usually in tablet form.

Home visits are usually paid a few days after the initial hospital attendance, when the patient will have given thought to his or her future. It is important to assess the patient's understanding of the instructions given by consultant and dietician, and also the manner in which both the patient and the family are reacting to the situation. Simple demonstrations in the home environment are of great value and much is done to assist the patient and the family to accept the situation and to encourage the patient to take a normal part in society.

LITTLE BROMWICH HOSPITAL

Of the total number of visits, approximately 180 were to the homes of children suffering from infectious diseases—mainly gastro-enteritis, dysentery and whooping cough and it is interesting to note that the majority of these children were admitted from the central areas of the City. The remaining 82 visits were made at the request of the hospital paediatrician to the homes of children with feeding problems. A number of the younger children with congenital abnormalities had been transferred to Little Bromwich Hospital from City maternity hospitals.

During the course of home visiting, much attention is given to health teaching in matters of personal and communal hygiene. Wherever necessary, mothers receive instruction in the care and handling of the baby, the preparation of baby feeds and the sterilisation of utensils. In many instances such help given to mothers has obviated the need for re-admission to hospital.

QUEEN ELIZABETH HOSPITAL

The follow-up work at this hospital is undertaken at the request of consultants, ward sisters, or almoners, with the consent of the general

practitioners concerned. A number of patients visited during the year had inoperable carcinomata; many other patients were suffering from a chronic illness or disablement.

Home visits were paid prior to the discharge of the patients to ascertain the facilities for home nursing, and detailed reports concerning housing conditions, etc., were supplied to enable the hospital staff to form a clearer picture of the patient-home relationship. In many instances these reports were of value in releasing hospital beds for the more acutely ill patients.

With the co-operation of the general practitioner, subsequent visits were made to many houses to complete the after-care.

THE ROYAL ORTHOPAEDIC HOSPITAL

During the year there appears to have been an increase in aged people with arthritis treated in the hospital. Many live alone and need assistance, e.g. from home helps, the Women's Voluntary Services, the National Assistance Board (supplementary pensions) and the Birmingham Fellowship for the Handicapped; or need the provision of gadgets, and or nursing equipment.

There are infinite problems to solve when visiting the homes of the patients admitted to this hospital, many of whom have been in for three months or more, or expect to be alone on their return home. A number need appliances to combat disability, e.g. a second bannister fitted to the staircase or a ramp to enable a wheel chair to be used around the house. Other problems encountered include provision of special gadgets for patients referred from general practitioners, aid of the Home Nursing Service or the Welfare Department and resolution of housing difficulties, e.g., overcrowding, difficult staircases or upstairs accommodation in the case of disabled persons.

In some coloured households racial customs are not easy to overcome. The language problem causes difficulty in explaining how to wear appliances correctly or the need to follow instructions given in hospital.

SELLY OAK HOSPITAL

Children were admitted with respiratory infections, convulsions, tonsillitis, meningitis, nephritis, acute rheumatism, leukaemia and occasionally diabetes. There were fewer feeding problems but the number of cases of poisoning in younger children due to dangerous liquids being stored in lemonade bottles or boxes of tablets being left in accessible places, remained distressingly high.

Visits are paid at the request of the paediatrician, ward sister and almoner. All children under five years of age and many over five years are visited after discharge. Visits on account of social problems and housing difficulties, or for children suffering from enuresis or pyrexia of

unknown origin which may be due to some emotional disturbance at home, are made whilst the child is still in hospital. Visits to defaulters resulted in more satisfactory attendances at the out-patient clinics.

In connection with the Diabetic Clinic the work followed the pattern already established at the General Hospital.

Statistics

WORK OF THE HOSPITAL FOLLOW-UP HEALTH VISITORS				
(a)	<i>Overall picture</i>		1958	1957
	Number of sessions at hospital ...	...	740	621
	Number of visiting sessions ...	...	703	605
	Total number of home visits ...	...	3,056	2,583
		<i>Number of sessions at hospital</i>	<i>Number of visiting sessions</i>	<i>Number of visits to patients' homes, etc.</i>
(b)	<i>Individual Hospitals</i>			
	Accident	160	79	440
	Children's	78	98	275
	Dudley Road	78½	59½	361
	General, Diabetic Clinic	81	77½	238
	Little Bromwich ...	43	46½	262
	Queen Elizabeth ...	76½	74	354
	Royal Orthopaedic	46	138	663
	Selly Oak	94	89	316
	Selly Oak, Diabetic Clinic	83	41½	147
		740	703	3,056

RECUPERATIVE CONVALESCENT CARE

With 765 patients recommended for convalescence the demand was only 8 less than in 1957 which was an unusually heavy year, as the following table shows :

Recommendations for Convalescence

		1958	1957	1956	1955	1954
January ...	...	14	14	18	15	26
February ...	...	37	39	20	24	31
March ...	...	36	89	47	35	47
April ...	...	100	91	57	59	71
May ...	...	115	99	57	74	85
June ...	...	119	118	85	91	92
July ...	...	100	116	72	68	91
August ...	...	78	93	60	80	56
September	...	78	49	57	59	77
October ...	...	44	32	33	40	37
November	...	29	24	31	16	20
December	...	15	9	8	8	16
Total for year ...		765	773	545	569	649
Percentage of total referred by G.P's	81%	75%	63%	60%	54%	
No. of patients referred by hospitals	148	196	203	230	299	

The proportion of patients referred by general practitioners has steadily increased and, in 1958, their 617 patients comprised 81% of the total.

Of the 765 patients 147, for the following reasons, did not accept the facilities offered.

Decided against leaving home	97
Made other arrangements privately	12
Found to be members of the Hospital Saturday Fund	5
Health deteriorated and patients became unfit for convalescence ...	30
Appropriate arrangements could not be made	2
Died	1

The following is the age and sex distribution of those who actually took convalescence :

<i>Age</i>	<i>0—4</i>	<i>5—15</i>	<i>16—44</i>	<i>45—64</i>	<i>65—74</i>	<i>75+</i>	<i>Total</i>
MALES	8	15	18	46	30	17	134
FEMALES	12	20	92	153	145	62	484

Among these were 19 mothers who took 21 babies with them.

The Birmingham Hospital Saturday Fund, to which the Health Committee makes a yearly grant of £550, in 1958 made arrangements for the convalescence of 6,423 patients of whom 5,712 went to the Fund's own homes. The Hospital Saturday Fund also assists a number of contributors who have to take their convalescence under the Health Committee's arrangements. It accommodates patients in its own homes who are not contributors to the Fund but take their convalescence under the Health Committee's scheme and charges are made to the Health Committee for these individual cases.

Occasionally grants are made to patients by the firms for which they work towards the cost of their convalescence.

Each account for convalescence is paid by the Department and initially the full amount is reclaimed from the patient, but with the option of being assessed to repay an amount in accordance with his means.

HEALTH EDUCATION

The main object of a Health Education Section is to educate the community in healthy living. This is not merely freedom from ill health but a full development of physical capacity and enjoyment of life, even in spite of poor environmental circumstances.

At one time compulsion had been the order of the day in abating nuisances and other contraventions of Public Health law, but now one seeks co-operation from the public by explaining the reasons why certain action must be taken and the benefits that accrue.

Staff

A medical officer is responsible for the administration of the section and there are organisers, ancillary lecturers, artists and clerical staff.

ORGANISERS

At the year end there was one organiser and one assistant organiser. The important part of their work is in organising, such as interviewing representatives of groups or bodies who request lectures; advising on content, method and planning of programmes; arranging for various members of the Health Department staff to undertake lectures and the collection of material for their use ; providing in-service training for staff members ; devising and revising visual aids ; maintaining an up-to-date library of books and pamphlets and demonstration material of all kinds ; reviewing films ; holding conferences with their medical advisor on new subjects and fresh approaches ; noting recent advances in social medicine and being available to advise any lecturer or body on the best means of presenting a health topic.

ANCILLARY LECTURERS

Field workers in the Public Health Department are encouraged to engage in health education as their knowledge and contacts place them already in an advantageous position. Therefore medical officers, health visitors, public health inspectors, home nurses, midwives, social workers and home help organisers, all having practical experience and specialized knowledge, should practise health education in their daily work and help in more formal group educational instruction. The Health Education Section supplements this work by having at the lecturers' disposal both visual media and an up-to-date collection of health education material. The progress of this policy is shown by the number of ancillary lecturers having risen from 41 in 1947 to 170 in 1958 and, during that time, a fairly extensive library of visual aids, posters, charts, films, film strips, flannelgraphs, books, pamphlets, etc., has been assembled.

ARTISTS

The one artist, working in close co-operation with the organising staff, has produced a collection of health education material such as posters, exhibitions, film strips, etc.

Volume of Work Undertaken

From 1948, when 2,438 lectures were given, there was a steady increase to a peak of 4,301 in 1956 since when there has been a decrease to 3,563 talks and discussions in 1958. The decrease has occurred through a reduction in organising staff and the programme in schools had to be curtailed until nine male nurses were given in-service training to equip them for carrying on the work in boys' schools. The new arrangements are a success.

Methods Employed

1. **INDIVIDUAL TEACHING.** This is probably the most successful of all methods and is carried out advantageously by the health visitor in the home ; she becomes an intimate of the family. This teaching can be directed where it is most needed. Social workers, district nurses, midwives, public health inspectors, can all be key workers in this respect.

2(a). **INFORMAL TALKS** given as part of the educational activities at welfare centres—brief six minute talks—are well received by the mothers ; group talks at antenatal sessions are probably not quite so successful as those at relaxation classes, as a mother may be anxious about her impending examination.

(b). Informal talks by invitation—these are the basis of all adult teaching. Some form of visual aid is employed and ample time is allowed for questions and discussions.

3. **BRAINS TRUST** methods are useful, especially in parent-teacher groups.

4. **DISCUSSION** technique is increasingly popular, particularly in youth groups, but the range of subjects that can be discussed by the comparatively inexperienced is obviously limited. This type of instruction is especially valuable for a small group.

Health Education among Organisations and Groups

GROUP I. Mothers and Expectant Mothers

Health visitors are mainly concerned and their importance can be assessed when it is realised that health visitors visit ninety-four per cent. of the homes in the City. Misinterpretation—one of the pitfalls of health education—is avoided because of the informality of the sessions ; problems, worries and fears are brought to light; emphasis is placed on the various immunisation procedures. The health of the entire household is the health visitor's concern and advice is given as to the care of people suffering from illness, expectant and nursing mothers, and the care of young children. Each new generation of mothers needs practical advice and the emphasis of the advice changes with advances in knowledge and trends in social habits and conditions.

GROUP 2. Teachers' training colleges, grammar schools, secondary modern schools, nurses' courses, medical and dental students, scouts, girl guides, etc.

A series of lectures on hygiene and parentcraft reaches 40% of the school children in the 11 to 15 age groups—in some instances the school teachers give similar instruction.

Adolescence, when childhood and adult life begin to overlap, is not always a time of subtle and easy change. At such a time the parent is probably the best guide, but parents seldom accept this responsibility. Here the child needs candour and knowledge and this type of education

is best given individually. Misguided and confused approaches can lead to embarrassment, misunderstanding and harm. Over emphasis or the special lecture on sex education is undesirable, but the subject is dealt with without emphasis in the normal school programme. In the 11+ age group it is linked with hygiene and in the 14+ age group it is directed towards parentcraft and respect for the opposite sex.

Nurses receive instruction on public health law, local authority administration and services, on hygiene, water supply, clean food, balanced diets, clean air, on the socio-economic aspect of disease and on the prevention of infection.

Medical students attend the Department for a session on the methods, aims, and objectives of health education.

GROUP 3. Youth organisations, clubs, day continuation schools, industrial apprentices.

These courses are often a continuation of the instruction the groups have already had in schools. Some of the larger firms solicit the help of the Health Education Section, and a series of lectures is offered on a variety of topics, such as courtship and marriage, the family, budgeting etc. Many young married couples expect too much for too little. They may have little knowledge of how to manage a joint household and little idea of the personal and economic problems involved. Teaching here is directed towards unselfishness, towards deciding between the essential and the contingent and towards successful budgeting. This may seem beyond the confines of the Section but really it is preventive medicine at its best.

GROUP 4. Women's organisations, social groups, young wives' clubs, study groups, parent-teacher groups, Darby and Joan clubs, etc.

The approach to this group is by the circularisation of the Health Education Syllabus, which lists titles of various lectures. Some of these have a designedly vague title so that all manner of problems can be discussed. Some are directed towards marriage and the home ; some deal with hygiene and social problems ; others are devoted to ill health ; others to the problems of the mentally and physically handicapped ; others to clean food and clean air, etc.—as comprehensive a programme as possible, balanced on the possibilities of instruction, utility and popularity.

GROUP 5. Winson Green Prison, remand homes, approved schools, probation hostels.

At Winson Green Prison there is a general course of health instruction for men and women prisoners. Group discussions on a wide variety of subjects but with a health bias are encouraged. As well, instruction is

given in a hostel where women, chiefly in prison on account of child neglect, are sent from all over England to receive a course of instruction ; four sessions per week are allocated to Health Education and are devoted to aspects of child care, family life, the behaviour pattern of children and home nursing. It is difficult to assess the value of these courses as many of the mothers return to slum conditions where every drawback exists and fundamental domestic amenities are missing. Follow-up reports are therefore often disappointing.

OTHERS

Co-operation is sought with any group which can further the advancement of healthy living. Contact has been maintained with coloured people's clubs where films on hygiene, home safety and prevention of infection have been shown regularly.

Medical practitioners are now borrowing demonstration material and they find film strips are of value in health talks which some are giving to their patients. Their influence on health education in their daily practice is most valuable.

Problem Families

Two houses in Lee Crescent have been converted into flats for the housing of "problem families" under the auspices of a voluntary body. On the invitation of the Warden, two series of talks on parent craft have been undertaken. Although it is impossible to assess the results, the Warden reported that the instruction was much appreciated and that it formed the "talking point" for many discussions among the tenants.

Exhibitions

In April an exhibition of health education demonstration material was arranged for the Society of Medical Officers of Health (Maternity and Child Welfare Group) at the Medical School. The group found this session most interesting and stimulating.

Another exhibition, comprising Dental Health, Care of the Feet and Protection of the Family against Disease, was held at Joseph Lucas Ltd., as part of their Health and Safety Week. There was a large attendance of the general public.

On the 5th and 6th September, at Handsworth Show, there was a demonstration on Care of the Feet and on Dental Hygiene.

Further exhibitions were held in October, one at the Royal College of Nursing ; the other at Messrs. Evans and Matthew's basement in Bull Street, in co-operation with the Birmingham Accident Hospital as part of a recruiting campaign for the Civil Defence Home Nursing Reserve.

Demonstrations have been regularly arranged at Loveday Street Maternity Hospital, the Birmingham Accident Prevention Council and in the windows of Moseley Road Welfare Centre.

“ Guard that fire ” Campaign

The National campaign “ Guard that Fire ” was launched in November with a view to reducing the accidents due to fire. Locally it was conducted by the Birmingham Accident Prevention Council but the help of the Health Education Section was solicited and there was full co-operation. Lecture notes on the subject were issued to the public health inspectors and health visitors ; the midwives and district nurses were instructed on the importance of the campaign, and all helped in the distribution of leaflets. “ Guard that Fire ” was the subject of the poster campaign ; an exhibition was on display in the window of the Moseley Road Welfare Centre, and a further exhibition in the foyer of the Gaumont Cinema, Steelhouse Lane. At Loveday Street Maternity Hospital inflammable fabrics were on display.

Smoking

Emphasis on the risks of smoking has been made to youth clubs and their wardens have been sent a circular asking them to consider “ Smoking ” as a subject suitable for their discussion. The response has been promising. To stress the importance of this subject, a medical officer always gives the instruction. A poster has been designed by the artist and has been displayed in all the secondary modern school and grammar schools of the City.

Visitors

Of special interest was the fortnight's attendance by seventeen students from University of London Institute of Education. As in previous years a request had been made by their tutor to have an opportunity of studying our programme. During their stay, facilities were given to make visits of observation to schools, prison, industry and welfare centres, etc. This proved a most interesting fortnight for the visitors and their hosts.

Visitors were also received from Australia, Chile, India, Japan and Nigeria.

The Clean Air Campaign

With the establishment of two additional smoke control areas during the year, and the announcement of further progress to be made in 1959, a steady demand for information has come from householders in, and outside, the areas concerned.

Every householder to be affected by such an order receives a booklet prepared by the Department, and sponsored by the Health Committee, and countless visits of explanation are also paid during the period of survey and before confirmation of an order.

Eleven lectures have also been given, with particular reference to the implications of a Smoke Control Area Order upon the domestic fuel

consumer, the total attendance recorded being 615, as compared with 332 for a similar number of lectures in the previous year.

There is still a tendency to consider solid smokeless fuels from the point of view of cost per ton of fuel, instead of cost per thermal value. For that reason it is unfortunate that a grant is not available to those willing to convert unless they happen to live in an area scheduled to become a smoke control area. Much of the good example potential is thus lost to the City.

The Clean Food Campaign

The lectures given during the year are summarised as follows (1957 figures in brackets) :—

				<i>Lectures</i>	<i>Total Attendance</i>
Food traders	...	...	...	9(10)	236(266)
Lay public	...	...	...	40(21)	1,185(786)

Once again it is clear that, except for training classes in certain of the food trades where a hygiene session is included in the syllabus, as in the Licensed Trade, and for a periodic effort on the part of certain of the larger firms, there is little response from the general food trader or caterer, unless and until some accident such as a food poisoning incident occurs.

It is true to say, however, that when such an incident has occurred, managements are usually only too ready to accept the offer of a talk to those of their staff who handle food, be they caterers or food-manufacturers. Such talks have a definite, if short-lived, impact on these occasions, serving to remind the food handler of his obligations under the Food Hygiene Regulations and thus ensuring a more positive response to them for some little time at least.

Talks to lay associations and groups and, in particular, to the older girls in grammar and secondary schools have proved to be much in demand, and the number of talks given during the previous year was almost doubled in 1958. This gratifying response should lead to a raising of hygienic standards in the domestic kitchen, and to a demand for a higher standard of clean handling by waitress and shop assistant. One must, however, doubt its influence on the kitchen staff behind the scenes. Here only the eternal vigilance of the public health inspector avails, although much could be done in hotels and the larger restaurants and canteens by adoption of the practice of “self-inspection” by some member of the staff specially trained and specifically charged with duties of inspection by the management. It is unfortunate that the Food Hygiene Certificate of the Royal Society of Health is not more generally recognised and adopted as an obligatory qualification of the catering manager or supervisor.

PRIORITY IN REHOUSING ON MEDICAL GROUNDS

As the arrangements were described in detail in the Report for 1957 and have remained unaltered, merely the recommendations made during 1958 are recorded in the table. There were in addition 182 referrals in which there was either no medical condition or the applicant could not be traced or, on investigation, the situation had already resolved itself, often by the applicant acquiring a satisfactory house.

APPLICATIONS ON GROUNDS OTHER THAN TUBERCULOSIS

<i>Type of medical conditions to which applicant has drawn attention</i>	<i>Points Awarded</i>				<i>Immediate rehousing recommended</i>	<i>Total applications</i>	<i>Percentage of Total</i>
	<i>Nil</i>	<i>10</i>	<i>20</i>	<i>30</i>			
Nervous conditions A	324	224	73	20	4	645	19.3
General debility B	71	42	6	1	1	121	3.6
Asthma and Bronchitis ... C	343	781	138	18	2	1,282	38.3
Wounds D	8	4	6	—	—	18	0.5
Blindness E	19	11	4	3	—	37	1.1
Arthritis and Rheumatism ... F	83	76	31	4	1	195	5.8
Orthopaedic conditions and paralysis G	85	44	35	4	4	172	5.1
Heart and Circulatory diseases H	102	84	108	28	11	333	9.9
Other physical disabilities including fits J	251	134	29	14	7	435	13.0
Gastric and Intestinal conditions K	51	45	14	1	1	112	3.3
TOTALS	1,337	1,445	444	93	31	3,350	100%

APPLICATIONS ON GROUNDS OF TUBERCULOSIS

Points Awarded

<i>Nil</i>	<i>10</i>	<i>20</i>	<i>30</i>	<i>Total Applications considered</i>
171	46	96	347	660

Among the 660 above applicants 605 (486 plus 119 brought forward from previous years) were further considered for urgent rehousing irrespective of the Points Scheme. Originally 159 of them plus seven others who had not yet been considered for the award of points, were recommended for immediate rehousing irrespective of the total number of points they might have. Subsequently 22 of these recommendations were withdrawn due to changes in medical condition or home circumstances.

DOMESTIC HELP SERVICE

(SECTION 29—NATIONAL HEALTH SERVICE ACT, 1946)

A very great proportion of domestic help time has been allocated to the care of the chronic sick, the aged and infirm.

Aged ill persons are thought of either as mobile or immobile. Help given on two or three half-days weekly to mobile elderly persons is of immense value, not only because it gives comfort and relieves anxiety, but also because it often delays for a considerable period of time the onset of immobility or entry into a hospital or welfare home. Of the 3,136 old persons provided with the service in 1958, 1,977 of these commenced to have help in 1957 or before.

The immobile aged ill person presents a greater problem, as many refuse hospital admission and, in the case of others, it may not be possible to obtain a hospital bed immediately. Night watchers, resident home helps and "poppers-in" are available to meet this situation. The Night Watcher Service is used only for persons who would otherwise require institutional treatment and is usually offered only to persons who are very ill and alone. It is used on occasional nights to relieve a relative of this duty.

Night watchers are carefully chosen ; a few have nursing experience, and all are interested in and fond of old people. Visits to the night watchers are made by a senior member of the staff between 8 and 11 p.m. at regular intervals, when it is often possible to follow up the course of instruction which is given them by practical advice and help which adds greatly to the patient's comfort for the night.

Resident home helps—generally widows—are selected from the home help staff, and they work in a temporary resident capacity for a fortnight mainly to cover the absence of relatives on holiday or in hospital. In exceptional circumstances the period may be extended to one month but not longer.

All home helps are asked whether they will volunteer for evening or week-end duty in an emergency. Anyone so volunteering is required to attend, at a time most convenient to herself, an ill aged person who may otherwise go without food or personal attention. Lists of names and addresses of home helps willing to undertake this service are prepared and in most cases a nearby telephone number is supplied for easy contact. The co-operation of members of the general public who deliver telephone messages to home helps is greatly appreciated. These home helps (known unofficially as "poppers-in") also bridge the gap between the departure of the home help and the arrival of the night watcher.

Five home helps have been delegated to the Psychiatric Social Service to assist in the work of problem families. During the year ninety-eight problem family children have benefited greatly by the friendly guidance of a home help. These cases are of long duration.

The Home Help Service has met the need of 65 potential problem families referred by the Children's Department, Family Service Unit,

National Society for the Prevention of Cruelty to Children or by direct application from the father in the case of the mother's desertion. This has enabled 203 children to remain at home where particularly understanding women endeavour to help families deprived of normal home life. The results achieved are for the most part rewarding to the home help, who has the satisfaction of knowing that she is doing work which is well worth while.

Good co-operation has been maintained with social workers, district nurses, health visitors and voluntary workers. A second meeting at Selly Oak Hospital was held when health visitors engaged on work in relation to the care of the aged, and the home help organiser met the geriatrician and the almoner of the hospital. The meeting resulted in a better understanding of each other's problems and some relief of pressure on the hospital beds by the supply of home helps has been achieved. Two useful contacts with the National Council of Social Service and the Birmingham Council of Social Service have been maintained. The home help organiser attends meetings called by these voluntary associations.

In September extra clerical assistance was given to the eight district home help offices and each office now receives assistance on five half-days. The more spacious ground floor accommodation at Head Office is much appreciated by the staff and also by members of the general public who call to make enquiries on behalf of ill or aged friends.

Statistics

(1) <i>Number of home helps at end of year</i>					1958	1957
Full-time (50 hours weekly)	...	...	...	...	68	64
Part-time (30 hours and over)	...	...	...	...	211	213
Part-time (under 30 hours)	...	...	...	...	591	590
Night watchers	...	...	...	...	23	27
					893	894
(2) <i>Number of families assisted during year</i>						
Maternity cases	...	...	...	...	852	881
Ill housewives	...	...	...	...	803	764
Special cases—potential problem families	...	...	...	...	65	110
Problem families (referred by Psychiatric Social Service)	...	...	...	...	18	10
Old persons' households (containing in 1958 4,027 ill persons)	...	...	...	...	3,136	3,053
Ill housewives with lung tuberculosis	...	...	...	...	57	59
					4,931	4,877
(3) <i>Visits paid by organisers</i>						
Maternity cases	...	...	...	...	941	980
Ill housewives	...	...	...	...	2,032	2,298
Old persons	...	...	...	...	6,832	7,110
					9,805	10,388

POSTAL DISTRICTS SERVED BY THE EIGHT HOME HELP OFFICES.



KEY : HOME HELP OFFICES. 1 2 etc.

(4) WORK OF THE DOMESTIC HELP SERVICE BY DISTRICTS

<i>District</i>	<i>Total No. of Home Helps</i>	<i>Full Time Equivalent</i>	<i>Applications</i>	<i>Families Helped</i>
Head Office supplying all areas	Full Time 50 Part time 30 hrs. + 7 16 hrs. + 4 15 hrs. — 3 <hr/> 64 Night Watchers 23	58	Maternity 1,319 Others 20 <hr/> 1,339 Night Watchers 168	Maternity 822 Ill housewives 93 Potential Problem families 17 Old people 16 Problem families 18 <hr/> 966 By night 153
Balsall Heath, Deritend, Small Heath Sparkbrook, Duddeston (part of), Sparkhill I	Full time 2 Part time 30 hrs. + 33 16 hrs. + 48 15 hrs. — 1 <hr/> 84	51	400	502
Brandwood, Fox Hollies, Hall Green, Moseley and Kings Heath (part of), Springfield. II	Full time 2 Part time 30 hrs. + 3 16 hrs. + 68 15 hrs. — 11 <hr/> 84	41	294	420
Kings Norton, Moseley and Kings Heath (part of) Northfield, Selly Oak III	Full time 3 Part time 30 hrs. + 29 16 hrs. + 70 15 hrs. — 6 <hr/> 108	61½	283	484
All Saints, Hands- worth, Lozells, Perry Barr, Rotton Park, St. Pauls, Sandwell, Soho. IV	Full time 7 Part time 30 hrs. + 40 16 hrs. + 55 15 hrs. — 6 <hr/> 108	66	408	571
Acocks Green, Sheldon Stechford, Yardley V	Full time 1 Part time 30 hrs. + 32 16 hrs. + 77 15 hrs. — 3 <hr/> 113	64½	226	432
Aston, Gravelly Hill, Kingstanding VI	Full time 3 Part time 30 hrs. + 20 16 hrs. + 78 15 hrs. — 7 <hr/> 108	58½	232	431
Duddeston (part of) Saltley, Erdington, Washwood Heath VII	Full time 0 Part Time 30 hrs. + 25 16 hrs. + 75 15 hrs. — 3 <hr/> 103	57	278	486
Edgbaston, Ladywood Harborne, Market Hall, Weoley VIII	Full time 0 Part time 30 hrs. + 22 16 hrs. + 72 15 hrs. — 4 <hr/> 98	53½	222	483

MENTAL HEALTH

(SECTION 51—NATIONAL HEALTH SERVICE ACT, 1946)

The Royal Commission on the Law relating to Mental Illness and Mental Deficiency, in presenting its Report, indicated the need for a general reorientation towards community care, placing considerable emphasis on the role of the local authority in carrying it out and indicating the need to expand the Mental Health Services. These are essentially of two kinds, preventative and those concerned with the care of the mentally handicapped in the community.

Preventive Services

Many might consider this term too hopeful and one which suggests that we know much more about the fundamental causes of mental illness, neurotic and psychopathic behaviour than we do and that we can influence them considerably. Certainly, to make such claims would be extravagant if not scientific folly and would indicate an overestimation of the contribution we could make. Nevertheless, the written work of others and one's own experience suggests that mental illness and maladjusted behaviour take root in early life and that the orientation of services towards the family and the parent/child relationship can have real preventive value, but if they are to have a significant effect they must be available to all families who need them. Naturally, a Psychiatric Social Service can never be big enough to see all the families, but by co-operation with the Health Visiting Service most family problems could be contained in their early stages.

The preventive service of the Mental Health Section then, has meant the orientation of the Psychiatric Social Service towards the family, in co-operation principally with the health visitors and has taken the form of counselling, active case work and intensive investigation at the Parent Guidance Clinic. By counselling is meant the psychiatric social worker or trained case worker acting as adviser and consultant mainly to the health visitors on social work problems and case-work methods. During the last year it has not been possible to increase the number of welfare clinics which have regular meetings with these workers, but this will be expanded in the near future. The number remains at 13.

FAMILY PROBLEMS SECTION

Those families which have such intense problems are cared for by the Family Problems Section of the Psychiatric Social Service. Heer

48 out of 101 were referred by health visitors during the year, the other main source of referral being the Housing Management Department. The type of problem covered by this Section is probably somewhat wider than that covered by the Family Service Unit. However, the line that separates problem families from families with problems is vague and, in fact, some would say non-existent. Nevertheless, it can be said that a fair proportion of the families supervised are typical problem families of the large, disorderly and messy type with living standards well below the neighbourhood average and an income which at times is insufficient for the immediate needs of the family. Others, less messy in appearance, have chronic problems that undermine the stability and happiness of the home, which may be in grave danger of disruption either through eviction or desertion or separation of one or other parent. Most of these families have young children and have been a problem that has caused concern to the health visitor. This type of service affords valuable help either directly or indirectly by general counselling.

Although the counselling activities and case work of the Family Problems Section is done mainly in conjunction with the health visitors, it is not limited to them. Case Conferences take place regularly with representatives of all organisations and the counselling service has been extended to the National Assistance Board field workers.

There is, as one can see, a very heavy demand on these workers and the service could not possibly continue without help and co-operation from all sides ; the facilities of special home helps have been invaluable in this respect.

PARENT GUIDANCE CLINIC

Those families which require psychiatric help are referred to this Clinic, which functions on similar lines to the Child Guidance Clinic, except that it restricts its intake to parents who have problems with children under five years of age.

The figures for 1958 show the number of cases referred from infant welfare clinics is fairly constant—83 as against 87 last year, this being about 66% of the total. The remaining 43 cases came through various social agencies, general practitioners or self-referrals. There is, however, great variation in the number of cases referred between one welfare centre and another and this variation is not linked with either housing conditions or economic factors. It would seem a psychological service for children under school age is still having to prove its worth, perhaps because preventive medicine, being less spectacular than curative medicine, is slow in gaining general acceptance.

COMMUNITY CARE SERVICE

This is principally concerned with admission to hospital, the support of the patient on discharge and the care and training of the mental defective in the community.

PRE-CARE AND AFTER-CARE

Until quite recently the work of the duly authorised officer and psychiatric social worker has been entirely separate and generally both have worked outside the hospital. This has meant that the hospital has had little say in or influence on the policy governing compulsory admissions and the Local Authority After-Care Service has had to stand outside the hospital and receive referrals for after-care in a rather haphazard, arbitrary and unsatisfactory way. This can be illustrated by the fact that at one of the four City Mental hospitals where the Psychiatric Social Service undertakes the social casework, after-care referrals have been around fifty a year, whereas at another only two have been referred in two years. As regards the other two mental hospitals, referrals have started to rise steeply immediately a closer liaison was established between the hospital and the Local Authority Mental Health Service. It is now planned to divide the psychiatric social workers and duly authorised officers into groups of two psychiatric social workers and two duly authorised officers to each hospital as soon as staff numbers will permit. These will work as a team closely associated with the hospital and concentrating on its catchment area, the team to be under the psychiatric direction of a psychiatrist in each hospital while they remain administratively responsible to the Medical Officer of Health. The advantages that it is hoped will follow are a reduction in compulsory admissions where there does not appear to be any urgency because of the danger of suicide or homicide. The patient will only be removed under a compulsory order after all other possibilities have been carefully considered. This will mean that in many cases the patient will remain where he is under the supervision of his doctor with the help of the duly authorised officers or psychiatric social workers while his case is being investigated and various alternatives considered. This may include discussions with the psychiatrist who, in cases of doubt, will be asked to make a domiciliary visit. If it is finally decided to be in the patient's and/or society's interests to remove him, he will go into hospital with a full social history dealing, not only with the relevant aetiological factors in the environment, but also the reason why in his case it was thought best to take him in under an order.

As regards after-care, there is little doubt that for this to be effective the after-care service must start long before discharge. It should, in fact, start with admission, the family being told that the patient has been taken into hospital for treatment and that there is every reason to hope that he will be returning home when treatment is completed.

Further, the relatives should be helped to understand how they can assist constructively in the treatment by visiting and reassuring the patient that there is a place waiting for him at his home as soon as he is well enough to return. With the increased turnover of patients entering and leaving hospital it is not possible to provide after-care for all, nor is it necessary, and so careful selection of those cases that need this service has to be done and should be done while the patient is in hospital. In one hospital it has been recommended that a distinctive label be fixed to the case papers at as early a date as possible for each patient whose illness and home circumstances are such that after-care appears necessary. In this way the psychiatric social workers will pick up after-care cases while they are undergoing treatment in hospital and will have an opportunity of getting to know the patient and his family and some of the relevant social and medical problems long before the patient leaves hospital.

The size of the problem can be seen from the following statement of the work undertaken under the Lunacy and Mental Treatment Acts 1890—1930, by the duly authorised officers :

<i>Classification</i>	Jan.	Feb.	Mar.	April	May	June	July	Aug	Sep.	Oct.	Nov.	Dec.	Total
Certified ...	41	31	31	22	28	22	40	26	25	27	21	29	343
Voluntary ...	227	227	223	210	202	162	227	159	216	219	182	160	2414
Temporary ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Section 20 ...	138	125	129	127	103	127	134	123	112	130	106	104	1458
Section 21 ...	—	2	—	—	1	1	—	2	3	1	2	4	16
Urgency ...	—	—	—	—	—	—	—	—	—	—	1	—	1
Not Certified ...	5	4	4	2	5	6	3	3	7	4	5	1	49
Withdrawn ...	—	—	1	—	—	—	—	—	—	—	—	—	1
Magistrates' Courts Act ...	—	2	—	1	—	—	—	—	—	—	—	—	3
Visits ...	183	158	151	131	186	191	161	143	140	135	173	196	1948
After-care ...	8	12	14	11	17	26	18	24	18	17	35	23	223
Totals ...	602	561	553	504	542	535	583	480	521	533	525	517	6456

Care of the Mental Defective

Unhappily as yet little can be done to prevent this type of mental handicap, but early recognition can do much to help it and the parents of

children who suffer from it. Again the help of the health visitor is invaluable, she can arrange special clinics at the welfare centres where particular difficulties are discussed with the parents and, if necessary, arrangements for further investigations, treatment and care are made.

Naturally, the majority of cases ascertained are those notified by the Education Authority pursuant to Section 57 of the Education Act, 1944, and others are notified by medical practitioners, relatives, hospitals, probation officers, magistrates' courts and welfare officers.

Particulars of cases reported during 1958.

	Under 16		Over 16		Total
	M.	F.	M.	F.	
Reported by Local Education Authority under Section 57(3) and (5), Education Act, 1944	44	28	2	—	74
Reported by Police or Courts	—	—	4	1	5
Reported by other sources	12	12	10	5	39
	56	40	16	6	118

Total cases on Authority's registers as at 31.12.1958

	Under 16		Over 16		Total
	M.	F.	M.	F.	
Under statutory supervision	289	206	751	580	1,826
Under voluntary supervision	—	—	7	12	19
In institutions	112	87	980	872	2,051
Under guardianship	—	—	3	1	4
Awaiting admission to institutions	48	19	17	7	91

The activities of the Occupation Centres cover elementary speech-training, word recognition, music and movement, habit training, domestic and sense training, physical training and handicrafts ; whilst at the Industrial Centres the subjects are more advanced and include basket-making, leather work, rug-making, boot repairing, clay modelling and woodwork. The object of such training is to develop a sense of muscular co-ordination and capacity for manual work, and to enable the patients as far as possible to fit in with community life.

As in previous years, the children were taken on outings to places of interest and visited the pantomime. Each centre had an " Open Day," and a Christmas Party at which the children gave an entertainment.

During March, June and October, 1958, 121 children attending the occupation and industrial centres were provided with a week's holiday in the country, free of charge. The scheme, which has been in operation for several years, is a great success as it proved a benefit both to the children, many of whom would not otherwise have had a holiday, and to their relatives who were able to have a rest from the responsibility of caring for the children at home.

Most of the patients travel to the centres by public service vehicles and fares are paid by the Health Committee. Guides are provided where necessary. A number of physically handicapped/mentally defective children are conveyed to the centres by private hire cars.

Fifty-five mental defectives, who are unable to attend occupation centres, are provided with training by Home Teachers in their own homes.

During 1958, 530 cases who were considered socially stable and secure and in respect of whom satisfactory reports had been received for some years, were discharged from statutory supervision.

Particulars of the centres are shown in the following schedule, together with the numbers attending :

<i>Occupation Centres</i>						<i>Under 16</i>		<i>Over 16</i>		<i>Total</i>
						M.	F.	M.	F.	
Erdington	...	...	...	...	...	20	13	—	—	33
Glebe Farm	...	...	...	...	...	16	15	—	1	32
Kingstanding	...	...	...	...	...	13	7	—	3	23
St. Oswald's	...	...	...	...	...	12	21	—	—	33
St. Paul's	...	...	...	...	...	30	15	—	—	45
Weoley Castle	...	...	...	...	...	14	20	—	—	34
Wretham Road	...	...	...	...	...	19	14	—	—	33

Industrial Centres

Bell Barn	...	...	...	...	...	8	—	39	—	47
Moseley Road	...	...	...	...	...	11	—	50	—	61

Senior Girls' Centre

Bell Barn	—	9	—	59	68
-----------	-----	-----	-----	-----	-----	---	---	---	----	----

The higher grade defective, who usually has been referred by the Local Education Authority under the Education Act, 1944, Section (5), receives supervision and support in the community on leaving school at 16 years. The need for this to continue is reviewed when the defective reaches 18 years. Since the inception of the Mental Deficiency Acts the training at the occupation centres and supervision under Statutory Supervision has been carried out by officers of the Education Department on behalf of the Health Committee. However, those who require support after 21 years now receive this from officers of the latter Committee.

Numbers under Statutory Supervision

						<i>Under 16</i>		<i>Over 16</i>		<i>Total</i>
						M.	F.	M.	F.	
Under Statutory Supervision	...	...				289	206	751	580	1,826
Approximate no. of females gainfully employed	...	...	...	...						310
Approximate no. of males gainfully employed	...	...	...	...						630
Number under Guardianship	...					3 females		1 male		

Guardianship cases were reviewed last year and all but the above discharged. Two of them are living outside Birmingham. Despite discharge a friendly interest is maintained in them.

In 68 cases where the home care of the patient became temporarily difficult, relief was given by short-term admission to hospital. Details are as follows :

	<i>Males</i>	<i>Females</i>
Illness of mother	14	9
To enable parents to take a holiday	21	8
Dental treatment for patients	1	4
Observation, pending permanent care	5	6
	<hr/> 41	<hr/> 27

The number of cases where a period of longer care was considered necessary was as follows :

	<i>Under 16</i>	<i>Over 16</i>	<i>Total</i>
	<i>M. F.</i>	<i>M. F.</i>	
No. of cases admitted to Mental Deficiency Hospitals during 1958	22 28	26 24	100
81 of this number were admitted informally.			
	<i>Under 16</i>	<i>Over 16</i>	<i>Total</i>
Awaiting admission to Institutions	67	24	91

LICENCE

On 31st December there were 103 patients (59 males and 44 females) on licence from various mental deficiency hospitals resident in this area supervised by the Local Health Authority's officers. This is the lowest figure for 20 years. Eighty-five have been found suitable employment and are successfully earning their own living ; the remainder are either incapable of employment or are too young.

Where there are no relatives available to give the patient a home or where it is considered that the home environment is bad, efforts have been made to find lodgings with sympathetic people who are generally prepared to accept the responsibility of holding the licence. There are 29 patients so placed, and in some instances two or three men live in the same house. The interest and assistance shown by the licensees in the patients' welfare is of great value in their rehabilitation and is much appreciated.

Examples of employment followed by these patients are as follows :

	<i>Males</i>	<i>Females</i>
Domestic service	—	14
Hotel service... ..	8	—
Hospital domestic staff	—	11
Factory workers	17	7
Laundry workers	—	2
Canteen workers	—	1
Corporation Salvage Department	2	—
Corporation Public Works Department	7	—
Corporation Parks Department	4	—
Corporation Transport Department (bus cleaners)	3	—
Miscellaneous	9	—

During the year, 66 (31 males and 35 females) were discharged from licence. Practically all were considered by the respective Hospital Management Committees in accordance with Ministry of Health Circular 56/25, which recommends that patients should be discharged after a trial on licence for twelve months at most unless there are overwhelming reasons to the contrary. The Department has made every endeavour to maintain a friendly interest in those patients discharged from Orders and prompt assistance has been the means of preventing a number from getting into serious difficulties.

As in previous years, arrangements were made during the summer for a number of those on licence to have holidays and 36 females and 10 males took advantage of this scheme. Most of the girls went to boarding-houses at Brighton, Hastings and Eastbourne, and were supervised by the Guardianship Society, Hove. We are most grateful for the help and co-operation given by this Society. The men went to Rhyl, Skegness and Llandudno, mostly to holiday homes under the auspices of the Y.M.C.A. The expenses of the holidays were borne by the patients and in every instance they travelled unaccompanied in small parties of two or three and stayed for a period of fourteen days. Not a single complaint was received regarding their behaviour.

Administration

- (a) Mental Health Sub-Committee of the Health Committee, composed of the Chairman and twelve members of the Health Committee. Monthly meetings are held.
- (b) Number and qualifications of staff employed in the Mental Health Service :

Responsible to the Medical Officer of Health for the Service, who in turn is responsible to the Mental Health Sub-Committee—
Administrative Medical Officer of Health for Mental Health—
M.B., Ch.B., D.P.H.

PSYCHIATRIC SOCIAL SERVICE

Consultant Psychiatrist (part-time), M.R.C.S., L.R.C.P., D.P.M.

1 Senior Psychiatric Social Worker—holds degree in Psychology (London) and Philosophy and Economics (Oxford).

3 Psychiatric Social Workers.

4 Social Workers (2 hold a Social Science Degree, one is a B.A. and one holds a Diploma in Mental Health).

Clerical staff—2 shorthand-typists.

PARENT GUIDANCE CLINIC

1 Consultant Psychiatrists, M.B., Ch.B., D.P.M.—4 sessions per week.

1 Psychiatric Social Worker.

1 Social Worker.

Clerical staff—1 shorthand-typist.

MENTAL DEFICIENCY SECTION

1 Certifying Medical Practitioner (part-time), F.R.C.S.I., L.R.C.P.I., D.P.M.

1 Chief Inspector
1 Deputy Chief Inspector
3 Inspectors

} no academic qualifications but
all possessing long experience.

Clerical staff—1 statistical clerk, 3 shorthand-typists, 1 junior clerk.

OCCUPATION CENTRES, INDUSTRIAL CENTRES AND AFTER-CARE

(Under management of Education Committee on behalf of Health Committee).

7 Supervisors (Occupation Centres). (4 hold Diploma of National Association for Mental Health).

2 Male Supervisors (Industrial Centres).

1 Supervisor (Senior Girls' Centre).

13 Assistant Supervisors (2 hold Diploma of National Association for Mental Health).

10 Welfare Attendants.

8 Kitchen Attendants (part-time)

1 After-Care Officer (B.Com., London).

5 After-Care Visitors. (1 is a B.Com. (Social Science); 1 is an M.A., Social Science Diploma; one is a State Registered Nurse, Domestic Science Diploma; the others have no specific qualifications but have relevant experience).

4 Home Teachers.

LUNACY SECTION

9 Certifying Medical Practitioners (part-time)

M.C., F.R.C.S.E.

M.B., B.Ch., B.A.O.

L.R.C.P., L.R.C.S., L.R.F.P.S.

L.R.C.P.I., L.M., L.R.C.S.I.

*M.R.C.S., L.R.C.P., D.P.M.

*M.D., D.P.M.

*M.D., L.R.C.P., L.R.C.S., L.R.F.P.S.

*M.B., Ch.B., D.P.M.

*M.A., B.M., B.Ch., D.P.M.

*These medical practitioners are of Consultant status. They also certify in cases where, having been called out in consultation, they find that certification is necessary.

1 Chief Duly Authorised Officer—Certificate of Poor Law Examinations.

1 Deputy Chief Duly Authorised Officer—no academic qualification but possessing long experience.

6 Duly Authorised Officers—three hold S.R.N. Certificate.

Clerical staff—2 shorthand-typists, 1 junior clerk.

(c) CO-ORDINATION

Reference has already been made to the joint use of officers of the Psychiatric Social Service, a service which will be extended in the near future, and to the supervision of patients on licence from Mental Deficiency Hospitals. In addition, reports are prepared on home conditions for the consideration of the Medical Superintendents and for the assistance of the Visiting Justices carrying out their duties in accordance with Section II of the Mental Deficiency Acts, 1913.

(d) DUTIES DELEGATED TO VOLUNTARY ASSOCIATIONS—NIL

(e) TRAINING OF MENTAL HEALTH WORKERS

No set training programme has been initiated for the training of mental health workers, but arrangements are made for attending clinical conferences at the hospitals and for series of lectures to health visitors on the foundations of mental health. The Health Committee has agreed to send one worker per year to receive training for occupation centre work at The National Association for Mental Health in London.

Educational Programme

Lectures and discussions were held at H.M. Prison, Winson Green, most hospitals in the City, training colleges, women's clubs and for the general public.

Total number of lectures, etc., given : 39.

INSPECTION AND REGISTRATION OF NURSING HOMES AND NURSES AGENCIES

(1) Nursing Homes (Public Health Act, 1936)

At the end of 1958 there were 13 nursing homes on the register which provided 223 beds. Of these 13 homes, 11 take only chronic or senile cases and one caters only for maternity cases. Three homes for chronic cases closed during the year, with 8, 7 and 4 beds respectively. One home for chronic medical cases increased its accommodation from 6 to 11 beds.

The total number of visits paid to nursing homes during the year was 42 (36 by medical officers and 6 by supervisors of midwives).

(2) Nurses Agencies (Nurses Agencies Act, 1957)

In accordance with the Nurses Agencies Act, 1957, applications were received from two Agencies, and renewals of licences were granted in both cases.

The total number of visits of inspection paid during the year was four.

MEDICAL CARE OF DEPRIVED CHILDREN CHILDREN ACT, 1948

The total number of children in the care of local authorities in England and Wales on 31st March, 1958 was 62,070 compared with 62,033 on 31st March, 1957. Birmingham's comparable figures are 1,276 on 31st March, 1958 as compared with 1,296 on 31st March, 1957. The number of Birmingham children boarded out in terms of The Boarding Out Regulations was 378 on 31st March, 1958 compared with 402 on 31st March, 1957. During the period 1st April, 1957 to 31st March, 1958, 649 children were taken into care and 669 were discharged from care, 533 of these returning to the care of their parents, guardians, relatives or friends; 16 fit persons orders were revoked. The number of children licensed to parents or relatives on 31st March, 1958 was 53, the same as the previous year.

The Home Office return for England and Wales for the twelve months ended 31st March, 1958, states that 60 per cent. of children taken into care were admitted because of illness, including temporary illness, of parent or guardian. In Birmingham the figure was 62·8 per cent. and it is interesting to note that the number of children taken into care because the parent is receiving treatment for mental illness has risen by 25 per cent. as compared with the previous year. The Home Office figures for England and Wales show that the children admitted during the year ended 31st March, 1958 who had been abandoned, lost or deserted by the mother make up 9 per cent. of the total number of deprived children. In Birmingham the comparable figure is 13 per cent., but if other categories of social failure are added the proportion rises to 32 per cent. in Birmingham as compared with a national figure of 37 per cent. The number of children admitted because of unsatisfactory home conditions has more than doubled this year as compared with last year. Five per cent. of the children were taken into care because of the death of one or both parents as compared with a national figure of 3 per cent.

The number of applications made to the Children's Department for the admission of children into care from 1st April, 1957, to 31st March, 1958, involved 2,763 children but only 22 per cent. of these were accepted. This shows how much can be done by the children's visitors through their supervision, help and encouragement to prevent the break-up of the family and inevitable separation of the child. Real preventive work will only be possible when all families have access to help with their family problems in their early stages, either by asking for it themselves or by being referred by other agencies who are realising more and more that such matters as overcrowding, truancy from school, cruelty to children and non-payment of rent, etc., contribute to or are indicative of social stress. The family should be recognised as the vitally important social unit.

The health of the children in the care of the Local Authority has been exceptionally good this year.

One death has occurred : a boy (born 22nd April, 1951) was admitted to Selly Oak Hospital with pneumonia. Having apparently recovered from this infection and while still in hospital his condition suddenly deteriorated and he died from purpura and congenital heart disease. He was mentally subnormal and awaiting admission to a mental hospital.

A little girl in care (born 9th November, 1953) was found to have an inoperable brain tumour when admitted to hospital for investigation, and though she has periods when her general condition improves, the outlook is grave.

NURSERIES

Children have suffered minor epidemics of measles and chickenpox. Two residential nurseries have had a few cases of scabies—an infection which we have not encountered in years.

The source of infection in one outbreak was a nursery student who had returned from a holiday at a seaside camp and, being on night duty, did not report her skin condition for some time.

In the other residential nursery a small child who had returned from a weekend with an "aunt and uncle," developed scabies. The outbreak was confined to the child's immediate family contacts in the nursery and the infection was quickly eliminated.

Another interesting epidemic in a residential nursery was that of Sonne dysentery. The source of this infection was a child who had been admitted to the nursery from a hospital. In spite of all possible precautions the infection spread through the nursery affecting five children and two nursery students.

After an interval of nine weeks several more cases occurred involving six children and three student nurses and the source of this recurrence was undoubtedly a symptomless carrier. Where such an infection occurs in a children's nursery, the chances of spread are high.

COTTAGE HOMES AND FAMILY HOMES have had an excellent health record and there have been no epidemics.

Minor accidents are dealt with mainly at the Out-patient Departments of the General Hospital (for children from Erdington group Cottage Homes and the north side of the City) and Selly Oak Hospital (for children in Shenley Fields group Cottage Homes and the south side of the City).

Twenty-two children from these homes have been admitted to hospitals for varying reasons, including appendicectomy (5), tonsillectomy (5), chest infections (5) and accidents (4).

Regarding the children in foster homes, the health records are satisfactory. Admissions to hospital have included tonsillectomy (2), mastoidectomy (3), appendicectomy (1), primary tuberculous infection

(1), chest infections (2), urinary infection (1), plastic operation for a deformity following an accident prior to the girl coming into care (1) and skin graft following an accident at work (1). Five children have had periods of convalescence.

REMAND HOMES—COPELEY HILL HOSTEL

The health of the boys and girls in these Homes has been excellent throughout the year.

The increase in juvenile crime is well illustrated by the high number of admissions to the remand homes which have persisted throughout 1958. In the senior boys' remand home alone, 572 new boys were admitted during the year, shared almost equally between the first and second half of the year, showing little fluctuation locally in the incidence of delinquency so far as boys over 13 years are concerned. The total number of child days for the last quarter of 1958 was more than 700 higher than in the corresponding period of 1957.

Total admissions to the junior remand home (boys 8—13 years) have risen by 100 in the last two years, being 311 for 1958.

SHAWBURY APPROVED SCHOOL—BOYS 15—18 YEARS (CAPACITY 80)

Two years ago a decision was taken to admit boys other than short term boys, and in consequence the following types of boys are now admitted :—

1. Boys who are emotionally disturbed by reason of poor family relationship and for whom psychiatric help is prescribed.
2. Boys with a combination of mental incapacity and educational retardation demanding specific remedial work in the classroom. They have a feeling of inadequacy and cannot cope with the ordinary upsets of everyday life.
3. Boys in whom there is evidence of anti-social psychotic behaviour.
4. Boys in whom there is evidence of mental deterioration.
5. Boys with violent tendencies possibly linked with adolescent sexual difficulties.

Psychiatric oversight, provided at this school by the Mental Health Section of the Department, includes interviews with boys, case conferences and informal talks with the masters and boys. Mental disorders of all kinds must be viewed as a matter of the person's health and wellbeing and not only as a matter of protecting society.

Much research is needed in the early stages of mental illness in children—when disorders of intelligence and personality are first recognised.

During the year five boys and five girls have had to be admitted to remand homes under Section 13, Sub-section 6 of the Children Act,

1948, as a place of safety while negotiations have been taking place in an endeavour to find suitable accommodation for their needs ; many attempts to improve their violent behaviour having failed.

There is a need for units dealing with the young psychopath in order to give him skilled help and guidance to enable him to live successfully in the community.

Medical Aspects of Adoption

The Adoption Act, 1958, which will come into force on 1st April, 1959, will consolidate the enactments relating to the adoption of children.

The Children's Department dealt with 358 notifications of intention to adopt during 1958 and during the year 317 adoption orders were granted. Of these, 50 were placings by the Children's Department, 65 were by adoption societies and other local authorities, 15 by third parties, 25 were direct placings and 162 related to children being adopted by parents or relatives.

When a baby is offered for adoption the mother must sign the necessary consent form relating to the adoption. The meaning of adoption is explained to her and once the adoption order is granted she has no further claim to her baby. The mother cannot give her consent to the adoption until the baby is six weeks old. Although the baby can be placed with the prospective adopting parents earlier, the necessary period of three months' supervision before the Court hearing of the adoption will not commence until the baby has attained the age of six weeks (Adoption Act, 1958).

Before a placing is made by the Children's Department the baby has a preliminary medical examination to exclude any gross disease and the prospective adopting parents must have been medically examined as to fitness and have a satisfactory mass radiography examination. Any of their own children must be medically fit and have a satisfactory x-ray. The home of the prospective adopting parents will have been visited and adoption as a whole discussed with the husband and wife and some assessment made as to their motives for adoption. After placing and prior to the Court hearing, the baby will have a detailed medical examination—to which the prospective adopting parents take the baby—the result of which can be discussed with the medical officer. This includes screening for deafness, physical and mental progress tests and a special test for the ascertainment of a rare form of mental defect.

Medical examination of a child as to its future fitness is far from easy, especially when children are placed at an early age, and requires a doctor with considerable experience and judgment. An older child is to some extent his own witness as to his normality and the assessment of the mental and physical state of a child of four years or over is more simple.

The past history of the mother of an illegitimate child is often scanty and that of the putative father often unobtainable. The details of the birth of the baby and its behaviour immediately afterwards are seldom known and yet knowledge of these would perhaps give a clue to possible abnormalities later.

Detailed medical examinations are made available on request, not only of children placed for adoption by the Children's Department but also for adoption societies, private and third party placings and neighbouring local authorities.

Where certain defects are found, these are discussed with the prospective adopting parents and the medical officer may advise against making the adoption final until a further examination. If a child is handicapped this is not necessarily a bar to adoption, but the doctor can give the applicants as accurate and authoritative a prognosis as possible so that they may know all the facts before deciding to proceed with the adoption.

Statistics

		<i>Adoption cases</i>
	Total medical examinations carried out during 1958	187
A.	Preliminary examinations of which two children were considered unfit. One of these had jaundice at birth followed by a replacement blood transfusion and showed certain features of mental deficiency ; the second had a collar bone deformity shown by x-ray examination and he was referred to an ortho- paedic surgeon. Both cases will be reviewed at a later date.	59
B.	Final detailed medical examinations of which 93 were considered satisfactory and 22 had minor defects, none of which was considered as a contra-indication to adoption, and 7 showed major defects (all except one showing mental retardation) and adoption was not advised. Sixty-two of these children were referred by the Children's Department, 47 by other adoption societies, 5 were private and third party placed and 8 were in residential care.	122
C.	Reviews of children from 1951 to 1957 of which two children had been adopted; two children were finally adopted ; and two back- ward children were not considered fit for adop- tion.	6

NATIONAL ASSISTANCE ACTS, 1948 AND 1951

COMPULSORY REMOVAL

During 1958 there was a slight increase in the number of referrals for removal under the National Assistance Acts. Forty-two cases were investigated (34 women and 8 men). So far as possible hospital admission was rendered unnecessary by the provision of local authority domiciliary facilities. In some cases it was possible to persuade old persons to enter hospital voluntarily, but two persons were removed compulsorily.

Case 1. An elderly woman, aged 82, had lived alone since the death of her husband ten years previously. She had gradually lost interest in herself and in her house and had become a recluse. Her health deteriorated, her house was neglected, she became bedridden and incontinent. Her medical condition necessitated her prompt admission to hospital, but she persistently refused to accept this advice.

Case 2. A man, aged 67, who had lived in a hostel for six years, suffered from heart failure but refused to have medical attention or to enter hospital. His poor physical condition and his unwillingness to accept essential medical and nursing care in the hostel, necessitated his removal to hospital under the National Assistance (Amendment) Act, 1951. He died a few days after admission.

INCIDENCE OF BLINDNESS

Statistics

Following a progressive rise in the number of registered blind persons, some stability now seems to have been reached.

<i>Year End</i>	<i>Total Registered Blind</i>	<i>Blind Children</i>	<i>Blind Men</i>	<i>Blind Women</i>	<i>Blind over 65 years</i>
1956	1,730	61	720	949	953
1957	1,721	61	706	954	965
1958	1,703	62	698	943	970

The number of blind women has exceeded the number of blind men by 35.1% in both 1957 and 1958.

The steady fall in the number of new certifications year by year during the past four years is shown below, but during the earlier part of this period the numbers were inflated by successfully disposing of a waiting list for medical examination.

Additions to the Blind Register

	<i>During 1955</i>	<i>During 1956</i>	<i>During 1957</i>	<i>During 1958</i>
Certified blind ...	257	232	169	144
Immigrants to B'ham	13	20	18	24

Deletions from the Register

Through death...	163	150	162	158
Left Birmingham	28	27	30	21
Sight improved...	1	3	4	7

The vast majority of deletions from the register occur through death. At the start of the year 56% of the blind were already over 65 years of age.

There was one case of retrolental fibroplasia causing blindness, in 1958—a boy whose weight at birth was 2lbs 14 ozs.

Forms B.D.8 received in the Health Department and relating to newly certified blind persons and to those blind already who moved into Birmingham, fell into the following categories.

Primary senile cataract ...	22	Local infection	1
Cataract congenital ...	5	Trauma	2
Glaucoma	24	Retinitis pigmentosa ...	2
Other congenital and here- ditary defects ...	7	Diabetes	14
Myopia	3	Ophthalmia neonatorum ...	2
Retrolental fibroplasia ...	1	*Other causes	44

* (These include senility, cause unknown, hypertension, arteriosclerosis, cerebral tumour, choroido-vascular degeneration and optic atrophy).

The following statement prepared by Mr. H. T. Salter, Chief Welfare Officer, shows the arrangements for care, education and employment of the blind.

<i>1st Jan.</i>				<i>31st December, 1958</i>			
<i>1958</i>				<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>
6	Babies at home	—	—	—	—	4	4
1	Babies in Sunshine Home ...	—	—	—	—	2	2
1	Child in Sunshine Home ...	—	—	—	—	—	—
—	Baby in Regional Board hospital	—	—	—	—	1	1
29	Children at school—resident	—	—	—	—	32	32
4	Children at school—day ...	—	—	—	—	2	2
10	Children of school age at home	—	—	—	—	12	12
10	Children of school age in Regional Board hospitals...	—	—	—	—	9	9
1	Undergoing rehabilitation	1	—	—	—	—	1
1	Undergoing training for open employment	—	—	—	—	—	—
—	Trained for open employment but unemployed	1	—	—	—	—	1
4	Adults in training—resident	—	4	—	—	—	4
3	Adults in training—day ...	5	1	—	—	—	6
114	Workers in open employment	92	16	—	—	—	108
177	Workshop workers	127	51	—	—	—	178
1	Adults employed in occupa- tion centre	1	1	—	—	—	2
19	Other blind employees ...	13	8	—	—	—	21
30	Homeworkers... ..	19	14	—	—	—	33
1,129	Unemployed in own homes	394	718	—	—	—	1,112
108	Unemployables in Regional Board hospitals	28	70	—	—	—	98
49	Unemployables in Welfare Department homes ...	17	37	—	—	—	54
24	Unemployables in Cowley Home	—	23	—	—	—	23
<hr/> 1,721 <hr/>				<hr/> 698 <hr/>	<hr/> 943 <hr/>	<hr/> 62 <hr/>	<hr/> 1,703 <hr/>

Register of Partially Sighted Persons

There is no statutory definition in the National Assistance Act, 1948, but the Ministry of Health has advised that a person who is not blind within the meaning of the Act but is nevertheless substantially and permanently handicapped by congenitally defective vision or in whose case illness or injury has caused defective vision of a substantial and permanently handicapping character be regarded as partially sighted.

At the beginning of 1958 the register contained the names of

194 persons :— 59 men ; 124 women ; 11 children

and at the end of the year

207 persons :— 64 men ; 123 women ; 20 children

Forms B.D.8 received in the Health Department and relating to newly certified partially sighted persons or those registered already and who were coming to reside in Birmingham fell into the following categories of causes :—

Primary senile cataract	...	11	Trauma	...	...	...	1
Cataract congenital	...	4	Diabetes	...	...	...	5
Glaucoma	...	5	Other causes	...	...	...	14
Other congenital and here-			(These include senility, cause un-				
ditary defects	...	3	known, hypertension, cerebral				
Myopia	...	3	haemorrhage and constitutional).				

Blind and Partially Sighted

Forms B.D.8 have been received for patients in the following groups.

Year of receipt of B.D.8	under 5	5—9	10—14	15—24	25—34	35—44	45—54	55—64	65—69	70—74	75—84	85—94	95 plus	Total
1955	7	3	—	1	10	8	22	38	33	44	111	47	1	325
1956	2	—	—	9	7	9	14	35	16	51	120	47	1	311
1957	3	10	—	1	4	5	22	26	21	24	86	32	1	235
1958	4	4	2	7	3	11	8	16	23	17	64	14	—	173

Persons over 65 years of age accounted for 68% of the cases in 1958, and 70%, 76%, 73%, 68% and 59% in previous years.

The causes of loss of vision and the treatment recommended were :—

	Cause of Disability			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(i) Number of cases registered during the year in respect of which Section " F " of the form B.D.8 recommends :				
(a) No treatment ...	20	11	1	42
(b) Treatment (Medical, Surgical or Optical)	22	18	—	59
(ii) Number of cases at (i) (b) above which on follow-up action at the year end had received treatment ...	7	14	—	35

The 29 glaucoma patients prior to registration as blind or partially sighted had received treatment as follows :—

Condition partially amenable to treatment	Condition not amenable to treatment	Failed treatment right eye	No treatment	Failed previous treatment	Surgical successful	Incomplete right eye failed left eye	Right eye successful	Treatment incomplete	Not known
1	3	1	8	11	1	1	1	1	1

At the examination for registration it was recommended that 18 glaucoma patients should receive treatment and, before the year end, 14 of them had in fact received it.

Ophthalmia Neonatorum

In no case was vision lost or impaired. At the year end 25 cases were known still to be under treatment but, of 3 others, trace was lost and 12 others left Birmingham.

The Deaf-Blind

At the end of 1958 there were 127 deaf blind persons residing as follows :

	Men	Women	Total
In own home	34	53	87
In homes and institutions	3	37	40
	37	90	127

The 87 living in their own homes can be divided into the following categories :—

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Unemployable ...	27	50	77
Employed in the Work-shops for the Blind	6	3	9
Employed in open employment	1	—	1
			<hr/> 87 <hr/>

The home teacher for the particular district in which the unemployable deaf-blind live visits and, in addition, visits are made by the specialist home teacher appointed to give the special welfare service which these people need, i.e., instruction in Manual Alphabet, Braille and Moon reading and pastime handicrafts, supply of hearing aids (replacements and repairs where necessary), escort to hospital, visits in cases of sickness, etc.

This service is also available to those at work and those in homes and institutions.

A social centre is held in the daytime and transport is provided by the Welfare Department. Some play dominoes, draughts and cards, but there are many who are content to chat with one another.

From voluntary funds the Birmingham Royal Institution for the Blind assists in holidays at homes for the deaf-blind at Hoylake and Burnham on Sea as well as arranging for a summer outing to the country and a party at Christmas.

CEREBRAL PALSY

The result of the excellent work of the Midland Spastic Association, which collaborates closely with the City Welfare Department and the School Health Service, is shown in the following statement which relates to Birmingham patients for the year 1958.

PROVISIONS MADE FOR 679 SPASTICS :—

CHILDREN UNDER 5 YEARS

Attending normal nursery schools	...	...	...	...	6
Attending the Cerebral Palsy Nursery Unit at Carlson House					
School for Spastics	...	...	...	...	5
In hospital	...	...	...	...	2
At home— out patient treatment	...	...	...	...	30
no treatment	...	...	...	...	29
					<hr/>
Total known cerebral palsy patients under 5 years	...	...	...	...	72 <hr/>
Estimated population under 5 years	...	...	...	...	87,600

CHILDREN AGED 5 TO 15 YEARS

Attending day school

Cerebral Palsy School, Carlson House,	23
Schools for physically handicapped	63
Other special schools (Deaf 10, E.S.N. 7,)	17
Schools primarily for normal children	83
Home tuition and training	11
Occupation centre	21

Attending residential schools

Cerebral Palsy School, Carlson House	2
Schools for the physically handicapped	2
Other special schools (hospital school 2, open air school 5)	7
In institutions for mentally defective	18
Remaining at home—ineducable	29
Remaining at home—educable—awaiting placement	4

Total known cerebral palsy patients 5—15 years	280
---	-----

Estimated population 5 to 15 years	179,300
---	---------

PERSONS OVER 15 YEARS

Still at school or receiving home tuition	22
Attending occupation centre	14
Home training	3
Outwork, part-time work, housewives,	17
Sheltered work	7
Normal work	92
Midland Spastic Association craft-classes	17
Other craftwork tuition	6
Institution for mentally defective	32
In cripples' or spastics' homes	6
In hospital	4
At home—capable of work under supervision	8
Capable of crafts only	32
Totally incapable	49

Total known cerebral palsy patients over 15 years	309
--	-----

Not yet investigated	18
-----------------------------	----

Total cerebral palsy patients of all ages in Birmingham	679
--	-----

The Welfare Committee of the City Council maintained three spastics in special homes, assisted one spastic with the cost of a holiday and ten spastics had the loan of a television set. The Committee has a handicraft scheme and in this eleven of the participants were spastics. In addition eighty-one of the handicapped persons taking part in the activities of the Birmingham Fellowship of the Handicapped were spastics.

EPILEPSY

Direct assistance was given by the Welfare Committee of the City Council to epileptics in the following ways during 1958.

Epileptics maintained in colonies	...	...	...	...	...	19
Participated in the handicraft scheme	...	...	...	...	...	10
Outwork arranged by the Welfare Dept.	...	...	...	...	...	3

Sixteen epileptics participated in the activities of the Birmingham Fellowship of the Handicapped.

In addition, at the end of the year, 25 children of school age were being maintained at residential establishments on account of epilepsy.

CREMATIONS, MEDICAL EXAMINATIONS, FIRST AID AND STAFF WELFARE.

The Medical Officer in charge of this section of the Public Health Department has three main duties which are entirely separate, namely, authorising Cremations, conducting Medical Examinations and supervising the First Aid and Staff Welfare arrangements throughout the Corporation departments.

Cremations

No cremation can take place in England or Wales without a referee's written authority and, in the case of Lodge Hill and Yardley Crematoria, this is given by the medical referee appointed by the Secretary of State on the nomination of the Corporation, or by a panel of five similarly appointed deputies who are also whole time senior medical officers in the Health Department.

Since the 1st May 1952, when the Health Department became responsible for authorising cremations, the numbers have risen steadily.

NUMBER OF CREMATIONS AUTHORISED

<i>Year</i>	<i>Lodge Hill</i>	<i>Yardley</i>	<i>Total</i>
1953	2,151	1,252	3,403
1954	2,524	1,503	4,027
1955	2,926	1,657	4,583
1956	3,040	1,721	4,761
1957	3,270	1,854	5,124
1958	3,341	2,057	5,398

Medical Examinations

Doctors of the School Health Service examine new entrants to the Education Department. New entrants to the permanent non-manual staff of all other Corporation departments are examined by the Medical Officer for Staff Welfare who also examines some of the many manual employees for entry to the Corporation's Sickness and Accident and Superannuation Schemes. The great majority of manual employees are however examined by a panel of doctors not on the Corporation Staff.

MEDICAL EXAMINATIONS

<i>Year</i>	<i>Non-Manual Employees.</i>	<i>Manual Employees</i>	<i>Examinations on behalf of other authorities</i>
1955	1,106	836	29
1956	905	894	25
1957	843	880	25
1958	938	950	34

First Aid and Staff Welfare

The surgery facilities in the Council House and Civic Centre have been of value to many Corporation employees.

Personal problems brought to the Medical Officer require time, patience and a sympathetic understanding for their solution. Real help can often only be given after several attendances.

SURGERY PATIENTS AND ATTENDANCES

<i>Year</i>				<i>Average number of patients per week</i>	<i>Number of Attendances</i>
1956	...	...	...	65	5,672
1957	...	...	...	63	5,432
1958	...	...	...	64	5,179

Working environment of all Corporation employees comes under examination and, during the year, improvements in heating and ventilation of the Civic Centre were initiated following careful study of the physical defects and comparing the absence rates in various departments housed in the Civic Centre and elsewhere.

Equipment for administering first aid is kept in all establishments and this is checked to ensure its good condition and conformity with modern medical practice.

FOOD AND DRUGS

Priority in the work of the public health inspectors will inevitably vary according to immediate or long term health needs but also according to the demands of newly introduced legislation. Where, therefore, pressure in the two previous years led to an emphasis on the condition and conduct of food premises, the import of the Rent Act which had become operative in 1957, and the continuing shortage of inspectors, have resulted in a reduction in the number of visits paid to food premises during the year except in the milk and dairies section where the staff has remained static and up to establishment.

The policy of authorising specially selected and trained sampling officers who are not public health inspectors is a satisfactory solution for a large Food and Drugs Authority where there is such demand upon the time of the understaffed qualified inspectorate. The vacancy for a sampling officer reported last year has not been filled, but the number and variety of samples submitted to the City Analyst for investigation of quality has been maintained and is included in his section of the report.

The existing allocation of duties in respect of purity of food between food inspectors of the Food Inspection Department and public health inspectors and specialised milk and dairies inspectors of the Public Health Department has been continued, the necessary close liaison being maintained between the two departments.

During the year inspectors made a total of 10,428 visits to premises as follows :—

Visits to cafes, hotels, restaurants, eating houses, clubs, school meals canteens, etc.	...	...	...	...	...	...	5,544
Visits to factories	...	...	...	...	...	...	982
Visits to bakehouses	...	...	...	...	...	...	263
Visits to licensed premises where food is sold	...	...	...	...	...	...	327
Special visits to licensed premises	...	...	...	...	...	...	614
							<hr/> 7,730
Visits to milk shops	...	...	...	...	...	...	2,698
							<hr/> 10,428 <hr/>

The total figure for visits of 10,428 shows a reduction as compared with a total of 12,305 in 1957 and this can be traced to the pressure of other work and visits by inspectors in dealing with applications and problems arising out of the Rent Act, 1957. Some reduction in the number of visits had been anticipated as the survey of checking food premises against the requirements of the Food Hygiene Regulations, 1955, had been completed in 1957. However, practically all eating houses and catering premises were visited each at least four times during the year and the general level of food hygiene was found to be well maintained.

The policy of persuasion and education practised by inspectors on their visits to food premises was in nearly all cases sufficient and well rewarding and in only three instances during the year was it found necessary to institute legal proceedings.

The first case which was brought before the Magistrates concerned a small sweet manufactory and involved ten charges for contraventions of the Food Hygiene Regulations, 1955. The offences related to the failure to keep clean hands, articles and utensils and to keep clean and in good repair the internal structure of the premises, the failure to provide first aid equipment and clean towels and to protect food from risk of contamination. A total fine of £14, plus costs, was imposed which had a salutary effect and improvement of conditions was noted on subsequent visits.

In the second case twelve charges were laid against a limited company, proprietors of a cafe, for contraventions of the Food Hygiene Regulations, 1955. As in the first case the offences related principally to the failure to keep clean articles and utensils and to keep clean and in good repair the internal structure and to protect food from risk of contamination. The charges also included one for failing to provide a washhand basin. In defence the company took out summonses against a former employee but these were not served and the Magistrates ultimately found seven of the charges to have been proved and the company was fined a total of £21, plus costs.

The third case concerned a small cafe and involved three charges for contraventions of the Food Hygiene Regulations, 1955. Two of the offences related to the failure to provide a washhand basin and to provide and maintain a supply of hot water. A total fine of £10, plus costs, was imposed on these two charges. A third charge was withdrawn as, prior to the hearing, a notice had been affixed near the sanitary convenience calling upon food handlers to wash their hands after using the convenience.

The washhand basin and hot water supply had still not been provided some months later and proceedings were authorised to secure a daily penalty in view of the continuing offence. The case had not been heard by the end of the year.

Eating Houses and Catering Premises

Section 54 of the Birmingham Corporation Act, 1935, requires the registration with the Corporation of all premises substantially or mainly used for the sale of food to members of the public for consumption on the premises. At the end of the year there were 1,167 registered eating houses compared with a figure of 1,169 eating houses at the end of 1957.

Such registered premises include unlicensed restaurants, cafes and snack bars, but exclude civic restaurants, school meals centres, works and office canteens and licensed houses. The Food Hygiene Regulations, 1955, are applicable to all these premises, however, and visits have been made to ensure the observance of the food handling laws and that a good standard of food hygiene is maintained.

Mobile Canteens

There were two new applications and one cancellation received and approved during the year leaving a total of 41 operators of mobile canteens registered under the provisions of Section 42 of the Birmingham Corporation Act, 1948. Under this section no one, other than a person keeping open shop for the sale of food, shall either by himself or by any person employed by him sell, offer or expose for sale any food from any cart, barrow or other vehicle or from any basket, pail, tray or other receptacle unless he is registered with the Corporation. In addition, if it is necessary to use premises for the storage of food intended for such sale from any cart, barrow, etc., then these premises must also be suitable and registered by the Corporation.

The general standard of food hygiene observed by the operators of mobile canteens was found to be uniformly good and they readily co-operated with inspectors in remedying any deficiencies.

Factory Canteens

The same high standard of hygiene has been observed in the running of factory canteens as has been revealed in previous years and, as catering establishments, they continue to compare very favourably with many "eating houses." There was a slight increase in the number of canteens operating, which at the end of the year totalled 806 as compared with a total of 802 at the end of 1957.

Bakehouses

The number of bakehouses in the City fell steadily during the year and a final check revealed that there were only 98 at the end of the year compared with a figure of 129 at the end of 1957. The principal factor in this can be traced to the effect of redevelopment in the central areas. In many cases customers had removed elsewhere and trade dwindled, while in some instances bakehouses themselves had been demolished. In a number of cases the taking over of a small baker's business by a multiple firm was also noted although the cessation of baking at the premises did not cease in every case.

Visits have been made approximately every four months and conditions in bakehouses found to be generally good. 39 of the bakehouses were solely engaged in the manufacture of cake confectionery, nine

restricted their baking to bread and the remaining 50 bakehouses produced, in varying proportions, both articles. Public health inspectors visited all bakehouses with the exception of 13 of the larger confectionery bakehouses which continued to be visited by the Milk and Dairies Section.

Following representations from the Health Committee to the Catering Committee, steps were being taken at the end of the year to secure new premises to accommodate the Civic Bakery.

Other Food Premises inspected included :—

Breweries	...	...	...	...	...	...	...	6
Sweet manufacturers	...	...	...	...	...	...	...	8
Biscuit manufacturers	...	...	...	...	...	...	...	2
Mineral water factories	...	...	...	...	...	...	...	6
School canteens (with kitchens)	...	...	...	...	...	...	...	215
School canteens (serveries)	...	...	...	...	...	...	...	247

With the exception of one sweet manufactory conditions at all these premises were found to be generally satisfactory.

Licensed Premises

Licensed premises where main meals are served are already subject to periodic inspection as catering establishments. Since beer is a food, the Food Hygiene Regulations, 1955, apply to all licensed premises and, following their consideration of a report on the matter, the Health Committee authorised the carrying out of certain special inspections. These took the form of an evening visit of observation at peak trading hours followed by a full inspection of the premises the next day.

During the year 226 premises were so visited bringing the number of premises visited since the survey began in August 1956 up to a figure of 640 out of a total of 947 " on-licence " premises in the City. The purpose of the inspections has been two-fold—firstly, to ensure that the requirements of the Food Hygiene Regulations, 1955, have been met and, secondly, to examine methods of handling and serving drinks with special attention being paid to the collection and disposal of waste beer.

Generally conditions were found to be good but in 17 cases it was necessary to write to the management or brewery concerning undesirable practices observed. In addition at 135 premises deficiencies of equipment or other conditions were the subject of letters to the respective breweries. The co-operation of both management and breweries has been readily obtained and improvements carried out where necessary.

MILK AND DAIRIES

There has been no alteration in the staff operating under the direction of the Administrative Medical Officer of Health (General Purposes).

The following details summarise the work of supervision of plant and premises carried out during the year :—

Visits to pasteurising plants	...	...	...	...	...	811
Visits to sterilising plants	...	...	...	...	...	785
Visits to wholesale purveyors	...	...	...	...	...	468
Visits to retail purveyors	...	...	...	...	...	720
Visits to ice cream manufacturers	...	...	...	...	...	775
Visits to ice cream dealers	...	...	...	...	...	6,485
Visits to iced lollipop manufacturers	...	...	...	...	...	554
Visits to iced lollipop dealers	...	...	...	...	...	6,485
Visits to milk bars	...	...	...	...	...	242
Visits to principal bakehouses (bread and confectionery)	...	...	...	...	...	644
Other visits	...	...	...	...	...	425
Unsuccessful visits	...	...	...	...	...	493
Interviews	...	...	...	...	...	326

In addition, public health inspectors made 2,698 visits to milk shops, primarily for the purpose of registration.

MILK

Milk Licences

The following licences were in operation at the end of the year :—

Pasteurising Plant—H.T.S.T.	...	...	...	...	...	7
Holder	...	...	...	...	...	1*
Sterilising plant	...	...	...	...	...	9
Wholesale and Retail Milk Distributors and Depots	...	...	...	...	...	56**
Dealers' Licences (Shop retail trade)	...	...	...	...	...	2,484
Tuberculin-tested Licences issued to producers of pasteurised milk for the production of Tuberculin Tested (Pasteurised) Milk...	...	...	...	...	...	8

*One dairy, processing by the Holder method, was closed down during the year.

**Two retail purveyors went out of business during the year and were removed from the register.

New plant and structural alterations are reported at a number of dairy premises in the City. These include :—

- provision of new milk-tipping and churn-washing facilities ;
- provision of new cold storage, new churn and bottle washer and extensions and improvements to receiving and loading decks ;
- extension to existing deck facilities ;
- provision of a new laboratory block.

Further work now in progress includes a new reception deck nearing completion, while installation of new processing equipment is due to be carried out early in 1959.

Agreement has not yet been reached with the Ministry of Agriculture, Fisheries and Food on the question of Ultra High Temperature Treatment of milk as an alternative to sterilisation. The method has now been adopted by a second dairy as a preliminary to sterilisation, with resultant saving in time and fuel used.

Complaints

The following complaints were received during the year :—

Dirt and foreign matter in bottles	...	...	...	...	...	13
"Watery" sterilised milk	...	...	...	...	...	3
Complaints from schools	...	...	...	...	...	7
Glass in bottles	...	...	...	...	...	2

Although the number of complaints received by the Department in respect of dirt, etc., in bottles is lower than for some years, it is appreciated that these complaints represent only a proportion of such incidents. The misuse of milk bottles continues to be a great source of trouble to the various dairy companies. The condition of empties returning to dairies continues to impose considerable and unnecessary strain upon dairy staffs and bottle washing facilities. Domestic bottles are seldom rinsed in cold water immediately on becoming empty, while those returned from factories, schools and building sites are sometimes found to be incapable of cleansing even by special methods.

Milk Sampling

Arrangements for the sampling of milk during delivery and in store have continued as formerly.

(a) RAW MILK

	<i>Total No. of samples taken for Methylene Blue Test</i>	<i>No. of failures</i>
Tuberculin tested	161*	13 (8·13%)

*One of these samples was declared void owing to an accident in the laboratory leaving an actual total of 160 examined.

(b) PASTEURISED MILK

	<i>Methylene Blue Test</i>		<i>Phosphatase Test</i>	
	<i>No. submitted</i>	<i>No. failed</i>	<i>No. submitted</i>	<i>No. failed</i>
From Dairies inside City :				
Taken from rounds	728	7 (0·96%)	722	2 (0·28%)
Taken from schools	290	8 (2·76%)	286	1 (0·35%)
From Dairies outside City :				
Taken from rounds	195	1 (0·51%)	193	Nil
Taken from schools	40	2 (5·00%)	40	Nil

Two of the failures of milk taken for methylene blue test from dairies inside the City were samples from milk-vending machines which are now in use in various parts of the City. The milk in question had been retained in the machines for more than twenty-four hours, and it seems important that an accurate estimate of the daily sale should be made and the machine loaded accordingly. A total of 25 such samples (included in the above figures) were taken during the year. Also included in the above are six samples of milk in "Tetrapak" cartons (3 methylene blue and 3 phosphatase) supplied to the Civic Restaurants. The three phosphatase failures were from samples taken on the same day from one particular dairy. An examination of the plant and the thermograph recording chart for the day in question showed no cause for these failures and the reason remains a mystery.

(c) STERILISED MILK

	<i>No. of samples taken for Turbidity Test</i>	<i>No. of failures</i>
From Dairies inside City during delivery	98	Nil
From Dairies outside City	47	Nil

Churn and Bottle Washing

More frequent examination of the churn and bottle washing machines at the City dairies has been carried out during the year with results as follows :—

(a) Bottles

A total of 87 bottle samples were taken and of these 53 showed colony counts of less than 200 per bottle. Where higher counts were recorded the dairies concerned were notified, the washers checked and repeat samples usually gave satisfactory results.

(b) Churns

A total of 59 churn samples were taken and are classified below according to the recommended standard of the Ministry of Agriculture, Fisheries and Food (National Milk Testing and Advisory Scheme).

<i>Colony Count per Churn</i>	<i>Classification</i>	<i>No. of samples</i>
Not more than 50,000 ...	Satisfactory	48
More than 50,000 and less than 250,000	Fairly satisfactory	3
250,000 and over	Unsatisfactory	8

One of the samples in the "unsatisfactory" class gave a count of less than 250,000 but was a "wet" churn and, in consequence, was degraded.

In addition, tests were carried out to determine the presence of B.coli in these samples. Two gave positive results—one in the "satis-

factory " class and the other being the one in the " fairly satisfactory " class which was degraded because of being " wet."

Cream

A total of 220 samples of cream were examined during the year.

In June 1958 a new provisional test, similar to that for ice cream, was introduced and the results of the bacteriological examinations are therefore divided as follows :—

Before the introduction of the provisional test, 83 samples were submitted to the methylene blue test as carried out on pasteurised milk. Of these, one failed the test and was further submitted to the B.coli test, with negative results. A sample of frozen whipped cream was submitted to the plate count and B.coli tests, giving a count of 650 colonies per 1 ml. with B.coli absent.

The remaining 136 samples were examined by the provisional test and the results are classified as follows :—

<i>Time taken to decolourize Methylene Blue</i>					<i>No. of Samples</i>	<i>Interpretation</i>
0 hours	...	...	...	...	20	unsatisfactory
$\frac{1}{2}$ hour	...	...	...	...	4	} only fairly satisfactory
1 hour	...	...	...	...	7	
1½ hours	...	...	...	...	5	
2 hours	...	...	...	...	4	
2½ hours	...	...	...	...	4	
3 hours	...	...	...	...	7	} satisfactory
3½ hours	...	...	...	...	5	
4 hours	...	...	...	...	8	
More than 4 hours	...	...	...	...	72	satisfactory
TOTAL					136	

Of the 64 samples decolourising methylene blue in 0-4 hours, 37 came from one dairy, 17 of these being taken from bulk supplies and 20 being bottled cream taken during delivery or from cold store.

It is worthy of note that figures for pasteurised cream given in the report of the Working Party, which recommended this test and classification, made reference to 1,618 examinations of which 658 or 40·66% decolourised methylene blue in 0—4 hours. The Working Party appeared to be in some doubt as to the correct interpretation of those results where decolourisation occurred at between $\frac{1}{2}$ and 4 hours and suggested that further experience of the test would be necessary.

At the same time, it must be borne in mind that there is no legal obligation to pasteurise cream and, although it is known that the samples taken had nearly all been pasteurised at some stage, very careful attention to the purity of "fresh" cream must be continued.

FROZEN CONFECTIONS

Ice Cream

During the year ten ice cream manufacturers' licences were cancelled, three transferring to sale only, four businesses withdrawing from the ice cream trade after a change of ownership, and three premises being demolished. Two manufacturers' licences were granted, leaving a total of 88 on the register at the end of the year.

The number of premises registered for sale only at the end of the year was 3,135, compared with 2,990 at the end of 1957. There were 283 new registrations and 138 cancellations, the premises in some instances being demolished as a result of redevelopment and the remainder ceasing to sell ice cream.

Four temporary registrations were granted for the sale of ice cream during exhibitions at Bingley Hall.

The premises of five persons desirous of making application for registration for the sale of ice cream were found on inspection to be unsuitable for recommendation for registration by reason of sanitary defects or the nature of the main business carried on. In each instance the unsuitability was pointed out and no further action was taken by the persons concerned.

Sampling has been continued as formerly, samples being submitted to the modified methylene blue test with results as follows:—

<i>Provisional Grade</i>	<i>Samples of ice cream manufactured on premises in the City</i>	<i>Samples of ice cream manufactured on premises outside the City</i>	<i>Total samples 1958</i>	<i>Results 1957</i>
1	283 (97·58%)	278 (99·64%)	561 (98·59%)	534 (90·97%)
2	6 (2·07%)	1 (0·36%)	7 (1·23%)	37 (6·30%)
3	Nil	Nil	Nil	7 (1·19%)
4	1 (0·34%)	Nil	1 (0·18%)	9 (1·53%)
	<hr/> 290 <hr/>	<hr/> 279 <hr/>	<hr/> 569 <hr/>	<hr/> 587 <hr/>

The one adverse result was from a manufacturer who ceased production for the season before a repeat sample could be obtained.

Informal sampling was also carried out under the Food Standards (Ice Cream) Order, 1953. This gave the following results :—

				<i>No. of samples</i>	<i>No. falling below standard</i>
Manufactured inside City	...	...	...	142	2
Manufactured outside City	...	...	...	61	Nil

The samples reported as falling below standard showed results as follows :—

<i>Fat</i>	<i>Sucrose</i>	<i>Milk solids not fat</i>
9·8	22·0	5·8
3·7	12·5	11·4
as compared with the statutory requirements of		
5·0%	10·0%	7·5%

The manufacturer concerned in the case of the fat deficiency ceased production for the season before another sample could be obtained.

Subsequent samples from the other manufacturer were satisfactory.

The average composition of the 203 samples taken was as follows :—

	<i>Fat</i>	<i>Sucrose</i>	<i>M.S.N.F.</i>
Average Composition (excluding " Parev ")	9·56%	14·24%	11·16%
Ice Cream manufactured in City (142 samples)	8·99%	14·26%	10·90%
Ice Cream manufactured outside City (59 samples)	10·95%	13·82%	11·76%
" Parev " Ice Cream (2 samples)	13·8%	20·8%	Nil

Iced Lollipops

There were 41 premises registered under the Birmingham Corporation Act, 1954, for the manufacture of iced lollipops, at the end of 1957. One further registration was effected during 1958 and three premises were removed from the register, two on cessation of business and one on demolition, leaving the number on the register at the end of 1958 at 39.

The number of premises registered for sale only at the end of the year was 2,923, compared with 2,770 at the end of 1957. There were 276 new registrations and 123 cancellations during the year.

One hundred and ten samples of iced lollipops were submitted for bacteriological examination and gave results as follows :—

All 110 samples were submitted to the B.coli test and four of these gave positive results. These four iced lollipops were manufactured outside the City and the manufacturers and the medical officers of health concerned were advised.

Forty-five were also submitted to the methylene blue test and gave the following results :— Grade I, 43 ; Grade 3, 1 ; Grade 4, 1. The Grade 4 result was related to one of the positive B.coli samples.

The remaining 65 were examined by plate count ;

<i>Colony count per 1 ml. of "lollipops" after 48 hours at 37°C.</i>								<i>No. of samples</i>
Nil	...	...	...	...	...	...	...	14
Under 50	...	...	...	...	...	...	...	45
Under 200	...	...	...	...	...	...	...	1
Under 1,000	...	...	...	...	...	...	...	5
								<hr/> 65 <hr/>

Forty-eight samples were submitted for investigation to determine the amount of metallic contamination. Two of these, both from a manufacturer inside the City, showed greater proportions of lead present than the 1 part per million recommended as the maximum permissible amount. The manufacturer concerned has ceased production temporarily and new moulds will be provided before manufacture is re-commenced.

BAKERIES AND CONFECTIONERY BAKERIES

The general hygienic standard of these premises has been well maintained during the year.

An outbreak of "rope" in bread produced by one of the larger bakeries occurred in July. Immediate energetic measures taken by the firm concerned, including the sterilisation of all equipment and the washing-down of all walls, floors and fittings with a hypochlorite solution, proved effective and no further trouble was experienced.

Imitation Cream

Routine sampling (a) at the larger confectionery bakeries (supervised by the Milk and Dairies Section) and (b) at the smaller bakeries (super-

vised by the Chief Public Health Inspector) has shown the following results :—

<i>Source of samples</i>	<i>Colony Count per 1 ml.</i>	<i>Number of Samples</i>	
		<i>(a) Larger bakeries</i>	<i>(b) Smaller bakeries</i>
Unopened Container	Nil	27	5
	1— 1,000	107	24
	1,001— 10,000	15	4
	10,001—100,000	11	2
	100,001—500,000	4	0
	Over 500,000	8	1
		<hr/>	<hr/>
		172	36
		<hr/>	<hr/>
Mixing Bowl	Nil	4	1
	1— 1,000	112	19
	1,001— 10,000	24	14
	10,001—100,000	10	4
	100,001—500,000	4	0
	Over 500,000	8	1
		<hr/>	<hr/>
		162	39
		<hr/>	<hr/>

Egg and Egg Albumen

The sampling of dried and frozen whole egg and egg albumen has been continued during the year at confectionery bakeries, cold stores, etc.

The results were as follows :—

			<i>No. showing Salmonella Infection (except S. pullorum)*</i>
	<i>Country of origin</i>	<i>No. of samples taken</i>	
Frozen Whole Egg	... England	317	30
	China	80	2
	Australia	23	Nil
Dried Whole Egg	... China	2	Nil
	Unknown	2	Nil
Fresh (Unfrozen) ...	... England	2	Nil
Frozen (liquid) Albumen	China	123	1
	Holland	6	Nil
	Argentina	6	Nil
	France	1	Nil
Crystals or Powder } Albumen	China	1	Nil
	Denmark	10	Nil
	Unknown	18	5
		<hr/>	<hr/>
		591	38
		<hr/>	<hr/>

* S.pullorum was not found in any sample — the Salmonellae reported being S.typhimurium (35), S.thompson (1), S.dublin (1) and S.newport (1).

WATERCRESS

One hundred and fifty samples of watercress, representing 34 different suppliers spread over 8 counties, were taken by the Food Inspection Department.

Bacteriological examination gave the following results :—

<i>B. coli</i> Type I				No. of samples
<i>per 100 grams of watercress</i>				
Nil	...	...	...	35
Under 100			...	39
Over 100 up to 240				3
Over 240 up to 480				20
Over 480	...	...		53
				<hr/>
				150

While it is true to say that no infection was traced, during the year, to consumption of contaminated watercress, the situation remains delicate. There is no legal or even recommended national standard of purity, so that a report of faecal coliforms in excess of 100 per 100 grams has been adopted provisionally as unsatisfactory.

Samples are invariably taken from the centre of the unopened "chip" and soon after consignments reach the market. The suggestion, therefore, that contamination has occurred during transit is most unlikely. Information received from medical officers of health of the areas from which unsatisfactory consignments have been received shows that the water supplies to the beds in question are commonly polluted; where a form of chlorination is practised, this is rarely satisfactory and often negated by keeping the packed chips in unchlorinated water after chlorination and pending dispatch, or by packing with contaminated ice. It is not unknown, moreover, for watercress, giving a strong odour of chlorine, to show also an unsatisfactory degree of contamination with coliforms of faecal type.

It must be appreciated that a local authority has no legal powers of seizure of a consignment unless and until an adverse report is received and, with the inevitable time lag of 5—7 days between sampling and receipt of report, such consignments are already sold and, presumably, consumed. If a wholesaler is asked to hold back the next consignment from this source pending a satisfactory report, that consignment would be quite unfit for sale by that time, and, in the event of a satisfactory report, the local authority would be liable for payment of compensation.

In the circumstances, therefore, the safety of the public rests solely upon the good will of the wholesaler in refusing to accept consignments from sources known to be polluted.

SHELLFISH

No infection has resulted from the consumption of shellfish during 1958.

One sample of oysters and 86 samples of mussels were taken by the Food Inspection Department and submitted to bacteriological examination during the year.

The sample of oysters showed no Type I *B.coli* per 1 ml. of fish.

The results of mussel examination were as follows :—

<i>B.coli</i> Type I per 1 ml. of fish	Sources of Supply			Total
	A	B	C	
Nil	19	29	15	63
0.25—0.5	4	5	1	10
0.75—1.0	1	3	3	7
1.25—5.0	1	3	—	4
over 5.0—10.0 ...	—	—	—	—
over 10.0—20.0 ...	—	2	—	2
	25	42	19	86

A high standard of purity has again been maintained by sources A and C, while mussels from source B, after a period of virtual sterility in the early months of the year, showed variable results later ; on two occasions, moreover, most unsatisfactory degrees of contamination with *B.coli* of faecal type were recorded, the average figures for 2 pools of 5 mussels each being 17 and 20 respectively.

In the course of investigation of these results, it came to light that these consignments, which have to travel by sea and then a further distance of 100 miles by road, do not reach the Birmingham market until at least 4 days after purification at the source. Efforts have, therefore, been made to expedite delivery after unloading at the port, but it is equally important that, after purification at the source, all risks of subsequent contamination should be eliminated during the period of waiting and transport to the place of shipment.

No mussels reached the City from the three other sources reported last year.

INSPECTION OF MEAT AND OTHER FOODS

(Report by C. G. Allen, M.R.C.V.S., D.V.S.M., F.R.S.H., Chief Veterinary Officer and Chief Inspector of Meat and Other Foods).

The Food and Drugs Act, 1955, the Food Hygiene Regulations, 1955, and the Byelaws made by the City Council, enable the Food Inspection Staff to exercise their powers of inspection and seizure and to maintain supervision of the City's supplies of meat and other foods.

Slaughterhouse licences continue to be subject to annual review and the licences of 23 slaughterhouses (14 connected with bacon factories) were renewed on 1st February. The licence in respect of one knacker's yard was also renewed.

Meat Supplies. Slaughtering in the City is mostly centralised and continues to depend mainly upon public slaughtering facilities at the City Abattoir. There are also large refrigerated stores at the Abattoir where imported meat is stored until distributed to retail shops.

The supervision of meat supplies from the Abattoir is maintained throughout the various supply channels to the retail shops, school meals centres, canteens and food preparation premises.

Slaughter of Animals and Inspection of Meat, etc. The slaughtering or stunning of animals in a slaughterhouse or knacker's yard is prohibited except under licence granted by the local authority.

The meat inspection staff at the Abattoir comprises qualified veterinary and food inspectors, who examine animals before and after slaughter, to ascertain their fitness for human consumption. These inspectors also supervise the slaughtering carried out by licensed slaughtermen, there being 218 slaughtermen's licences in force at 31st December, 1958.

A laboratory is maintained at the Abattoir, to assist in the diagnosis of various diseases.

The vehicles used in the City for the transport of animals and of meat are subject to inspection.

Bacon Factories. Inspectors are constantly engaged examining the carcasses of pigs slaughtered at the 14 bacon factories in operation in the City. These inspectors also examine meat supplies on sale in the shops connected with the bacon factories. For these purposes 2,155 visits were made.

The Slaughter of Pigs (Anaesthesia) Regulations, 1958 which came into force on 1st December, 1958, deal with the use of carbon dioxide gas as an anaesthetic for pigs when slaughtered for food. An installation of this nature is being provided at one of the bacon factories and is expected to be in use by March, 1959.

Private Slaughterhouses. There are 9 private licensed slaughterhouses in the City and all carcasses are inspected by the district food inspectors : 1,101 visits were made during the year.

CARCASSES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE
OR IN PART

	CITY MEAT MARKET (C.M.M.). PRIVATE SLAUGHTERHOUSES (P.S.)					BACON FACTORIES
		<i>Cattle</i>	<i>Calves</i>	<i>Sheep & Lambs</i>	<i>Pigs</i>	<i>Pigs</i>
Number killed ...	C.M.M. P.S.	46,897 1,695	46,508 131	199,379 11,261	88,428 1,805	236,862
Number inspected ...	C.M.M. P.S.	46,897 1,695	46,508 131	199,379 11,261	88,428 1,805	30%
<i>All Diseases except Tuberculosis and Cysticerci</i>						
Whole carcasses condemned ...	C.M.M. P.S.	30 —	401 —	434 5	233 2	312
Carcasses of which some part or organ was condemned ...	C.M.M. P.S.	632 45	237 —	10,227 263	2,723 65	3,035
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	C.M.M. P.S.	1·41 2·65	1·37 —	5·35 2·38	3·34 3·71	1·41
<i>Tuberculosis only</i>						
Whole carcasses condemned ...	C.M.M. P.S.	78 —	19 —	— —	16 —	42
Carcasses of which some part or organ was condemned ...	C.M.M. P.S.	3,308 75	6 —	— —	2,827 48	11,885
Percentage of the number inspected affected with tuberculosis ...	C.M.M. P.S.	7·22 4·42	0·05 —	— —	3·22 2·66	5·04
<i>Cysticercosis.</i>						
Carcasses of which some part or organ was condemned ...	C.M.M. P.S.	256 3	— —	— —	— —	— —
Carcasses submitted to treatment by refrigeration ...	C.M.M. P.S.	390 4	— —	— —	— —	— —
Generalised and totally condemned	C.M.M. P.S.	— —	— —	— —	— —	— —

No horses were slaughtered in Birmingham for human consumption.

Tuberculosis in Slaughtered Cattle

Since the area plan for the eradication of bovine tuberculosis was introduced in 1950, the percentage of cattle slaughtered at the Public Abattoir affected with tuberculosis has fallen steadily :—

<i>Year</i>			<i>Percentage of cattle killed at Public Abattoir, affected with tuberculosis</i>	<i>Percentage of cattle certified as free from tuberculosis to total cattle for Great Britain</i>
1950	...	...	27.1	22.1
1951	...	...	24.1	31.2
1952	...	...	21.1	39.8
1953	...	...	19.2	43.7
1954	...	...	15.0	49.8
1955	...	...	10.2	60.0
1956	...	...	8.1	67.0
1957	...	...	7.4	76.0
1958	...	...	7.2	85.0

Fish, Poultry and Vegetable Supplies. The wholesale supplies of fish, poultry, fruit and vegetables in the markets are subjected to regular daily inspection. In the case of shellfish and watercress, samples are taken for bacteriological examination and supplies of shellfish which do not conform with required standards of cleanliness are prohibited from being sold in Birmingham.

Hawkers. Bull Ring hawkers of foodstuffs, who purchase their goods in the wholesale markets, are regularly visited by a food inspector. Section 42 of the Birmingham Corporation Act, 1948, provides for the registration of hawkers of food and of their storage premises, and at 31st December, 1958, registration had been effected in 333 cases. During the year street hawkers were visited 27,823 times.

Retail Food Shops and other Premises. After foodstuffs have been distributed from the wholesale markets to retail shops, they are still under the supervision of the district food inspectors, for which purpose the City is divided into nine districts. The district food inspectors take steps to ensure that the provision of the Food Hygiene Regulations, 1955, are complied with, and they also draw the attention of shopkeepers and others to the requirements of the Marking Orders relating to foodstuffs, made under the Merchandise Marks Act, 1926. At the request of the Town Planning Department and the Estates Department, special inspections are carried out to see that premises which are proposed to be used for the sale or storage of food conform to the requirements of the Food Hygiene Regulations.

The following retail shops were visited :—

						<i>Number</i>	<i>Visits during 1958</i>
Beef and pork butchers	...	...	...	...	...	1,020	21,013
Grocers and hucksters...	...	...	...	...	...	5,503	7,040
Greengrocers	...	...	...	...	...	1,190	8,097
Fish friers	...	...	...	...	...	450	700
Fishmongers	...	...	...	...	...	617	6,112
Horseflesh	...	...	...	...	...	1	6
						<hr/> 8,781 <hr/>	<hr/> 42,968 <hr/>

The following food preparation premises, registered under Section 16 (1) of the Food and Drugs Act, 1955, were visited :—

	<i>Number</i>	<i>Visits during 1958</i>
Sausage, cooked meat and pork pie manufacturers	271	8,316

In 10 cases registered food preparation premises changed hands and the register was amended accordingly.

Inspection of Meat, Fish and Other Foods at School Meals Centres, etc. The premises visited included :—

						<i>Number</i>	<i>Visits during 1958</i>
Institutions and Residential Homes	...	...	...	...	...	49	515
School Meals Centres	...	...	...	...	...	236	2,651
						<hr/> 285 <hr/>	<hr/> 3,166 <hr/>

In cases where food supplies or storage conditions are found to be unsatisfactory at school meals centres, reports are sent to the Education Department.

Supervision is also maintained of meat supplied to institutions, schools, etc., and a check is made for quality and prices according to the conditions of contract.

Complaints and Request Inspections. During the year 1958, complaints and request inspections numbered 3,840.

Foods judged as unfit. Condemned meat and offal are not used for human consumption in any form, but are utilised by the Corporation Salvage Department and manufactured into fertilisers, meat and bone meal, etc. Other condemned foodstuffs are disposed of by burning.

FOODS JUDGED AS UNFIT

<i>Number of Surrenders</i>	<i>Class of Foodstuffs</i>	<i>T.</i>	<i>£.</i>	<i>q.</i>
10,618	Meat and Offal	521	14	2
407	Fish	34	15	3
155	Poultry, etc.	4	9	3
662	Fruit and Vegetables	449	10	1
1,873	Miscellaneous	81	8	1
<hr/>		<hr/>		
13,715	1958	1,091	18	2
<hr/>		<hr/>		
13,349	1957	1,026	6	3
<hr/>		<hr/>		

Byelaws requiring the sterilisation of Animal Feeding Meat.

Byelaws made under Section 43 of the Birmingham Corporation Act, 1948, requiring the sterilisation of animal feeding meat, have been in operation since 1st December, 1950.

Prosecutions

	<i>Fine</i>
Food and Drugs Act, 1955 : Section 8 :	
Sale of mouldy sausage roll	£3 and 10/- costs
Food and Drugs Act, 1955 : Section 2 :	
Sale of tartlet containing a nail	£10
Sale of pie containing a portion of pan scourer ...	£5
Sale of loaf containing part of a cigarette	£20 and 15/- costs
Sale of loaf containing a screw	£15 and 20 - costs
Sale of loaf contaminated with dirt and sawdust ...	£20 and 10/- costs
Sale of scone containing a nail	£10
Sale of cake containing a nail	£15
Merchandise Marks Act, 1887 : Section 2	
Sale of low grade apples under a false trade description... ..	£20

THE MILK SUPPLY

(Report by C. G. Allen, M.R.C.V.S., D.V.S.M., F.R.S.H., Chief Veterinary Officer).

City Dairies

Regular monthly veterinary inspections are made of all City dairy herds: 448 visits were made to cowsheds during the year ended 31st December, 1958. At the end of 1958 there were 11 dairy farms, eight of which had attested herds, and the total number of cows kept was 334.

On each visit the cows were examined for any evidence of disease or uncleanness and for preventing danger to the public from the sale of infected milk. The health and cleanliness of cows in City dairy herds were generally good.

TUBERCULOUS MILK INVESTIGATION. In addition to the clinical examination of dairy cows, twelve bulk samples of milk were collected from City dairy herds for biological testing. None were infected.

Individual samples of milk and sputum samples were also taken and examined in our own laboratory by the veterinary inspector dealing with the investigations.

TUBERCULOSIS ORDER. There were no cows in City dairy herds dealt with under the Tuberculosis Order.

CONTAGIOUS ABORTION. In connection with the Ministry's voluntary scheme for vaccination of heifer calves against contagious abortion, 21 calves have been vaccinated.

COWSHEDS. Any conditions relating to the buildings and water supplies, coming to the notice of the veterinary inspector, affecting or likely to affect the health and cleanliness of cattle, are reported to the Ministry of Agriculture Fisheries and Food. No such complaints were made during the year. A fairly high standard of cleanliness is being maintained, and all cowsheds have been limewashed or sprayed at least twice during the year.

Tuberculosis and the Milk Supply

In order to detect the source of tuberculous milk and to eliminate the infected cattle, four dozen samples of milk are collected weekly and submitted for biological test. In addition to the samples of milk taken at depots, samples are also collected from City dairy farms as stated above.

The system is to sample as far as possible each source of supply, and samples are obtained from raw milk before heat treatment. During the year changes have been made in the system of sampling. Firstly, the sampling of tuberculin tested milk has been stopped and, secondly, instead of sampling one churn only from each farmer, a sample is taken from each churn in the consignment. These changes have been made principally because of the big increase in the percentage of attested cattle in the past few years.

During 1958, 2,352 samples were taken and the following table shows the number of herds sampled and infected :—

<i>Origin of milk</i>	<i>No. of herds</i>		<i>No. of tuberculous cows traced</i>
	<i>Sampled</i>	<i>Infected</i>	
Gloucestershire	30	0	0
Herefordshire	28	1	0
Leicestershire	82	8	2
Shropshire	128	0	0
Staffordshire	454	23	15
Warwickshire	483	5	3
Worcestershire	478	2	3
	<hr/>	<hr/>	<hr/>
	1,683	39	23
City Dairies (bulk) ...	12	0	0
	<hr/>	<hr/>	<hr/>
	1,695	39	23
	<hr/>	<hr/>	<hr/>

(The herds sampled included 63 tuberculin tested herds, all of which were found to be free from infection).

The 39 infected herds represent 2·4% of the total number of non-designated herds sampled, compared with 2·5% of non-designated herds infected in 1957.

With regard to the infected samples, in addition to notifying the County Medical Officers concerned, and in order to avoid delay, copies of notifications are sent to the County Divisional Veterinary Officers of the Ministry of Agriculture, Fisheries and Food (Animal Health Division), who arrange veterinary examinations of the herds concerned in order to find and eliminate the infected cows.

As a direct result of sampling milk for the presence of tubercle bacilli, 23 tuberculous cows were known to have been eliminated during 1958 from dairy herds supplying milk to Birmingham. At 7 farms the investigations had not been completed at the end of the year.

Tuberculosis (Attested Herds) Scheme

The Ministry of Agriculture, Fisheries and Food introduced the Area Plan for the Eradication of Bovine Tuberculosis on 1st October, 1950. and at the 31st December, 1950, the percentage of attested (certified as free from tuberculosis) cattle to total cattle in Great Britain was 22·1. Good progress continues to be made and at 31st December, 1958, approximately 85 per cent of all cattle in Great Britain were in attested herds, as against 76 per cent. a year ago.

The Tuberculosis (Attested Herds) Scheme, 1958, came into operation on 1st December, 1958 and revoked the 1950 Scheme. The veterinary provisions do not, however, differ from those of the old scheme ; the alterations made deal only with financial and administrative matters.

The figures in the following table show the position at 31st December, 1958, for Great Britain, and comparison with earlier years :—

<i>Year</i>	<i>Total cattle population 4th June</i>	<i>Number of attested herds 31st December</i>	<i>Number of cattle in attested herds</i>	<i>Percentage of attested cattle</i>
1939	8,118,788	13,874	477,481	5.9
1949	9,263,945	44,889	1,762,200	19.0
1950	9,630,757	55,045	2,123,920	22.1
1951	9,513,521	74,025	2,977,056	31.3
1952	9,303,133	96,429	3,702,995	39.8
1953	9,508,101	111,875	4,154,134	43.7
1954	9,785,558	126,616	4,875,628	49.8
1955	9,766,781	152,077	5,862,051	60.0
1956	9,993,000	167,757	6,795,000	68.0
1957	9,911,000	185,543	7,570,000	76.4
1958	10,014,000	209,938	8,557,000	85.4

In addition to the 209,938 attested herds, there were also 3,869 supervised herds at 31st December, 1958. These herds need only one clear tuberculin test to qualify as attested herds.

The position as at 31st December, 1958, in the counties with which we are chiefly concerned, was as follows :—

<i>County</i>	<i>Total cattle</i>	<i>Number of attested herds</i>	<i>Number of cattle in attested herds</i>	<i>Percentage of attested cattle to total cattle</i>
Derby ...	182,000	2,693	119,000	65
Gloucester ...	207,000	3,708	184,000	89
Hereford ...	161,000	4,223	147,000	91
Leicester ...	171,000	1,759	91,000	53
Salop ...	299,000	6,336	271,000	91
Stafford ...	234,000	3,472	152,000	65
Warwick ...	149,000	2,080	107,000	72
Worcester ...	105,000	1,658	71,000	68
England ...	7,091,000	128,091	5,731,000	81
Great Britain ...	10,014,000	209,938	8,557,000	85
Great Britain			at 31/12/1957	76
Great Britain			at 31/12/1950	22

TUBERCULOSIS ORDER. Post-mortem examinations were made on three cows which had been sent to the City Meat Market from outside farms, and a report of the post-mortem examination in each case was sent to the Ministry of Agriculture, Fisheries and Food.

TUBERCULOSIS (SLAUGHTER OF REACTORS) ORDER, 1950. There were slaughtered at the Public Abattoir 24 cows which had been kept on premises in eradication areas or attested areas and which had reacted to tuberculin tests. A report of the post-mortem examination in each case was sent to the Divisional Veterinary Officer of the Ministry of Agriculture, Fisheries and Food.

Tuberculin Testing of City Herds

The following animals were tested by veterinary officers of this department during 1958 :—

Monyhull Hall Hospital Farms	137 animals tested and passed.
Rubery Hospital Farm	111 animals tested and passed.

ENVIRONMENTAL HEALTH SERVICES

HOUSING

Post-war slum clearance, as a part of the re-planning of some of the City's worst areas of bad layout and obsolete development, may be said to have started in June, 1947, when the Minister of Town and Country Planning confirmed an Order made by the City Council under Section 9 of the Town and Country Planning Act, 1944.

This Order, the Birmingham (Central Redevelopment) Compulsory Purchase Order, 1946, related to five areas grouped around, but not including, the central part of the City. They totalled nearly 1,000 acres and contained 30,000 houses of which some 28,000 were unfit.

Confirmation of the Order authorised transfer of the ownership of the properties affected thereby to the Corporation. The first batch of 277 dwellings passed into Corporation management under a Vesting Declaration in October, 1947, and the vesting of all houses, in a sequence based on this Department's assessment of their condition, was virtually completed by the end of 1953.

The number of houses erected by the Corporation during that period was 18,352 and among the dwellings so provided was a twelve-storey block of flats built on the site of the first houses to be vested.

Although the primary purpose of the operation was a planned redevelopment of the five areas, its continued progress depends on the rate at which the properties can be demolished, this, in turn, being governed by the supply of replacement housing. It was known from the start that a high proportion of the houses coming into Corporation ownership would have to remain in occupation for some years at least; in fact, amelioration of the conditions under which their occupants were living was a secondary purpose of the Order.

A Central Areas Management Section of the Estates Department, transferred later to the Housing Management Department, was therefore created to deal with this new situation. This enabled urgent items of disrepair to be dealt with as soon as possible after the houses became vested in the Corporation. Repairs, to an extent which varied from routine maintenance to complete renovation depending on the expected "life" of the property, were carried out systematically thereafter. In very few cases, and for special reasons such as the conversion of two houses into accommodation for one large family, were houses made fit for human habitation. The aim throughout was limited to making conditions more tolerable for the tenants; in fact, due to their inherent defects, it would be impossible to make most of these houses fit, at any cost.

Birmingham's action in facing the realities of a housing situation which prevented the demolition of houses mostly fit for nothing else,

was a valuable experiment and the experience gained by the Housing Management Committee was put to good use when action to deal with unfit houses as such, and not as subsidiary to City redevelopment, was resumed in 1955. This resumption was in pursuance of the policy laid down in the White Paper "Houses—The Next Step."

The nation's 13½ million houses were there divided into four categories; essentially sound, old fashioned, dilapidated, slum; and local authorities were given power in the Housing Repairs and Rents Act, 1954, to deal appropriately with each class.

So far as the slum houses were concerned, Part III of the Housing Act, 1936, already required a local authority to put unfit houses into Clearance Areas and then, subject to confirmation by the Minister of Housing and Local Government, to secure their demolition either by the owner under a Clearance Order, or by the authority itself demolishing the houses and retaining the land, under a Compulsory Purchase Order.

Exercise of such powers is, of course, contingent, among other things, on the Minister being satisfied that the authority can make satisfactory arrangements for the rehousing of the displaced tenants, a condition with which it is quite impossible for Birmingham to comply, unless demolition can be deferred and related to the supply of new houses.

The 1954 Act, now largely superseded by the Housing Act, 1957, required local authorities to submit to the Minister, within 12 months of its coming into force, their proposals for dealing with the unfit houses in their area, those able to demolish and replace them with new houses within five years being expected to do so.

From the Department's records it was known that Birmingham had 50,250 unfit houses at that time and the period required for their demolition was estimated by the City Engineer and Surveyor to be at least 25 years. This total of unfit houses was made up of 25,500 which had already been acquired by the Corporation, mostly situated in the Central Redevelopment Areas, and 24,750 in private ownership.

The 1954 Act was especially valuable to authorities such as Birmingham, in that it gave legislative effect to views expressed in the White Paper which preceded it; firstly, that it is a national duty to make more tolerable for the people who have to live in them, those slum houses which must be used for years to come, and secondly, that the task of so doing must be entrusted to local authorities.

It did this by the introduction not only of powers to defer the demolition of houses which were capable of providing "accommodation of a standard which is adequate for the time being" but also to carry out such works as are necessary to maintain them in that category pending their ultimate demolition. Nevertheless, essential as power to defer the demolition of unfit houses may be at the present time, it is an expedient only, and not a solution to the slum problem. To quote from a succession

of Housing Acts, "the most satisfactory method of dealing with the conditions in the area is the demolition of all the buildings." But that can only be done if an ample supply of houses is available, and the production of new Corporation houses was, by then, falling each year, with a further steep decline in prospect as land within the City boundary became used up.

In fairness to the 60,000 families then on the Housing Register, a number which has now reached 71,000, and allowing for rehousing under Demolition Orders and other urgent categories, it was decided that not more than 1,400 houses a year could be demolished to facilitate the redevelopment of the Central Areas. This contribution to slum clearance meant that many of the houses in the five Redevelopment Areas must continue in occupation for several years and that, among the estimated 25,000 unfit houses lying outside those Areas due to be acquired by the Corporation under the resumed Slum Clearance Programme, some would remain tenanted for 20 to 30 years.

In passing, it may be said that the suggestion in my Report for 1955 that the figure of 25,000 unfit houses outside the Central Redevelopment Areas might prove to be too low, was well founded. Houses not then included in the programme are, because of steady deterioration, likely to be the subject of Clearance Area action within the next few years. Even after excluding houses where works of repair and improvement have been carried out by owners, owner-occupiers and in some cases tenants, current experience indicates that the figure may well prove to be nearer 28,000.

Now the programme of deferred demolition is well under weigh, the Corporation finds itself the landlord of 6,075 unfit houses managed by the Housing Management Committee additional to those vested under the Central Redevelopment Scheme.

On acquisition, immediate attention to urgent matters is followed by systematic renovation, and more than 16,000 houses have been so dealt with up to the present time.

It is hoped that completion of the renovation programme will be followed by improvements in all cases where both the remaining "life" of a house justifies it and its size and layout makes such improvement technically and economically feasible.

But many houses which, in due course will qualify for such treatment, are closely associated with back-to-back or similar type houses of which one of my predecessors, Sir John Robertson, said in his Annual Report just 40 years ago,

"Its chief defect, in addition to its lack of size, its dampness and its dilapidation, is that it is not self-contained. There is no water supply inside the dwellinghouse, no adequate provision for discharging slop water and the only sanitary convenience is often some distance

from the house and usually common to two or more dwellinghouses. This convenience is frequently in a revolting condition because of its common user. There is no bath or means of having a bath in any of the houses, which are in many cases surrounded by metal or other works giving off smoke and dust so that it is impossible for an occupant to keep himself clean or to cultivate any green thing in the neighbourhood of his house. The whole outlook from these houses is sullied by soot besmirched in a soot laden atmosphere.

It is impossible to imagine a rising generation of young people being able to improve in health or self-respect even if the best of educational facilities are provided when everything they come in contact with is sullied by dirtiness and squalor. In my opinion there is only one remedy—the replacement of these slums by decent houses in a pleasant environment.”

That picture of the slums of 1918 is not descriptive of those of to-day, and the surrounding atmosphere is cleaner, but many houses to which it referred are not only still occupied but likely, in many cases, to remain so for up to another 25 years.

As they come into its control their dampness and dilapidation are remedied by the Housing Management Department but they remain small, inconvenient and not self-contained.

Those few houses which, on acquisition, have no internal water supply or means for the disposal of waste water are provided with those amenities ; but water-closets are still shared and not readily accessible even if rising standards of living have removed the grosser objections.

The standard of not more than two houses to each water-closet, which is applied to these properties, is far from satisfactory today. Most of these shared water-closets are in common courts and often some distance from the houses they serve. Their being so sited is probably because of the need to keep at a distance the cruder conveniences which preceded them and in whose structure later types of fitting were installed when the water-closet was introduced.

Next to disrepair involving danger or gross interference with full use of the house, the sharing of a water-closet is the defect most disliked by tenants, especially those with children, and it is one for whose remedy most tenants would willingly pay extra rent.

Good housing is the basis of good health but the occupants of these unfit houses, despite an average expenditure by the Housing Management Committee of £247 a house on repairs, must continue to live for many years yet in an environment which hinders at least, and may often seriously restrict, that development of mind and body which our educational and health services are designed to promote.

Mr. J. P. Macey, the Housing Manager, has kindly supplied the following information from which it will be seen that, in addition to the

renovation of Central Areas houses, vested in the Corporation under Section 9 of the Town and Country Planning Act, 1944, a substantial start has been made during the year on the renovation of the houses scheduled for "deferred demolition" under the Slum Clearance Programme.

1. (a)	Number of houses renovated during 1958 :—	
	(i) In Redevelopment Areas	1,489
	(ii) In Clearance Areas	527
(b)	Total number of houses renovated up to 31st December, 1958	16,216
(c)	Number of houses at which renovation was in progress at 31st December, 1958	1,264
(d)	Number of houses in respect of which repair schedules or contracts were prepared or were in course of preparation at 31st December, 1958	1,150
2.	Average cost of renovation per house during 1958	£247
3.	Average number of initial tenants' complaints per week during 1958	1,620

Clearance Areas

The inspection of sub-standard houses, the inclusion of those found to be unfit for human habitation into Areas, and the preparation of the plan required by statute to accompany the official declaration of each Clearance Area under the Housing Act, 1957, has continued to be the principal duty of the Housing Section of the Department during the year.

As a result 96 Clearance Areas comprising 4,322 houses were re-presented in 1958, so that the total number of houses so far represented as unfit, out of the 18,000 scheduled for such action under the current five-year programme, has now reached 13,146 leaving a balance of 4,854. To this must be added the almost certainly low estimate of 7,000 unfit houses still to be dealt with at the conclusion of the present programme.

During the year, not only were eleven Public Local Inquiries held, involving the preparation of evidence in support of the Corporation's case for the inclusion of the 2,100 houses concerned in Clearance Areas, but 101 Orders, made by the Council some time previous to 1958, were confirmed by the Minister of Housing and Local Government. The number of houses included in those Orders was 3,693, and they passed into Corporation management within a few weeks of confirmation.

Up to the end of 1958, 12,812 unfit houses in addition to those in the Central Redevelopment Areas have been included in Clearance Areas, the first step to their acquisition by the Corporation, and 24 Public Inquiries have been held to consider objections by the owners to the Orders based on those Clearance Areas. Although the Minister of Housing and Local Government has varied some Orders to permit the owner to retain the land once the houses have been demolished, in only 12 instances out of the 7,283 houses on which he has so far adjudicated has he disagreed with the Corporation's contention that the houses are unfit for human habitation.

The contrary judgement on at least some of those 12 houses is puzzling and leads to administrative complications but must, of course, be accepted.

Broadly speaking, Clearance Areas are formulated as far as possible on a basis of dealing with the worst houses first. But experience shows that the time and effort of this and the other Departments concerned are used to best advantage if unfit houses are dealt with in blocks of reasonable size, rather than by the sporadic and piecemeal action which would certainly result if the condition of each individual house was the only factor considered. For this reason, cases do occur where the official representation of a small unit of comparatively poor houses must be deferred because of its close association with a larger block of somewhat better, although still unfit, houses.

Nevertheless, as the programme progresses, the blocks being surveyed contain an increasing proportion of houses whose unfitness is less obvious and which may, in fact, lie in the "no man's land" separating the fit house from the statutorily unfit.

To justify inclusion in a Clearance Area houses must not only be unfit for human habitation but the Council must be satisfied that their demolition is the most satisfactory method of dealing with the conditions in the area. The likelihood of that demolition being deferred for some years is, of course, quite irrelevant to the issue of whether or not the houses merit inclusion in a Clearance Area.

Deterioration

During 1958, there was, as expected, an increase in the proportion of houses requiring a detailed individual inspection before a just assessment of their suitability or otherwise for Clearance Area action could be made. As a result, in several instances this led to the omission not only of individual houses, but of units of various size—generally comprising houses of near bye-law or similar type—from the Clearance Area in which the immediately adjacent houses were included.

As failure to maintain houses in good condition is often attributed by their owner to uncertainty about the future intentions of the Local Authority, it is reasonable to expect that the omission of a unit of houses from a contiguous Clearance Area, by removing that uncertainty, will stimulate the carrying out of renovation or even improvement.

Unfortunately, experience not only fails to support that view but indicates that in many cases failure to arrest their deterioration will lead to the inclusion of those very houses in a later Clearance Area.

Ideally, once it is decided, following inspection, that the degree of unfitness of a unit of houses is not such as to justify its inclusion in a Clearance Area, a notice should be served on the owner under Section 9 of the Housing Act, 1957, requiring him to make the house fit by carrying out specified works.

A very small start has, in fact, been made in this direction during the year, but it seems likely that shortage of staff will continue to limit the carrying out of this duty which, prior to its cessation in 1939, led to the thorough repair by their owners of an average of 1,400 houses a year.

Resumption of this duty, by preventing the deterioration of such houses into slums, would relieve the Corporation of later heavy expenditure. It would also be welcomed by some owners, at least, in that compliance with a Section 9 notice ensures the freedom of the house concerned from slum clearance action, subject to proper maintenance, and might well lead to the provision of modern amenities with the aid of an Improvement Grant.

The Corporation's financial assistance towards improving a house which its owner is prepared to put into good repair at his own expense would be considerably less than the expenditure which it would incur a few years later in putting the, by that time unfit, house into a condition merely "adequate for the time being."

The Individual Unfit House

In addition to the representation of blocks of unfit houses under Part III of the Housing Act, 1957, 108 dwellings, not less unfit but so situated as to need separate action, were also dealt with under Part II, as shown in the table which follows. Such dwellings may include caravans, cellars, attics or parts of buildings, as well as individual houses. In the case of an individual house this action may result in its demolition, its closure as a dwelling, its acquisition by the Corporation, or its thorough repair by the owner to an approved specification.

Particulars of action taken with regard to individual dwellings during the year, under Part II of the Housing Act, 1957 are :—

(1)	Houses represented as unfit for human habitation	...	106
(2)	Owner's undertaking accepted :		
	(a) Not to relet for human habitation	... ..	1
	(b) To make fit for human habitation	... ..	1
(3)	Demolition Orders made	... ..	99
(4)	Actual demolitions up to 31st December following action under (1), (2a) or (3)	... ..	54
(5)	Demolition following action under (1) only	... ..	4
(6)	Undertaking to make fit complied with	... ..	1
(7)	Closing Orders made as demolition would affect adjacent buildings	... ..	14
(8)	Houses to be acquired by Local Authority	... ..	2
(9)	Part only of building represented and closed for human habitation	... ..	2
(10)	Closing Orders on part of building cancelled	... ..	3
	Total number of individual dwellings dealt with between September, 1939 and 31st December, 1958	... ..	1,597

A high proportion of the dwellings concerned are demolished, where that can be done without disturbance of adjacent property, or become

the subject of an undertaking not to relet for human habitation, signed by the owner. An official representation was made during the year in respect of a large old house, the subject of a sub-sub-lease, whose gross deterioration and type of occupancy as well as occupant, had for years been an increasing source of concern to this and other Departments. It was expected that acquisition by the Corporation would be the most likely outcome.

In the event, however, the head lessee, in conjunction with the freeholder, exercised his right to submit a scheme of works to make the house fit. This, after amendment, was approved, the work done and the house, after several years misuse, is now available for normal occupation.

Drawing Office

The plan is an important part of the Clearance Area representation and, during the year, the four members of the Drawing Office staff have been fully engaged, in all weathers, in the preparation of these important parts of the Corporation's evidence.

Not only is definition of the Area on a map a statutory requirement, but the accurate plans prepared for its declaration as a Clearance Area are of great assistance to the City Estates Officer in his negotiations for purchase after confirmation of the Order.

Information to Prospective House Purchasers

The owner-occupier of an unfit house may, in certain circumstances, suffer very serious financial loss from the inclusion of that house in a Clearance Area. Despite the increased work and responsibility entailed, therefore, it is satisfactory to note that the number of enquiries made by, or on behalf of, intending house purchasers has almost doubled in the past year and has now reached an average of 38 a day. Most of these enquiries are from prospective owner-occupiers but in some cases the applicant may be a vendor, already financially committed to buying a more modern house, who seeks an explanation of statements made by us which have led an intending purchaser to withdraw.

A service of this kind can only maintain its reputation for reliability if it is based on adherence to an orderly programme of representations with as few divergences to meet particular cases as possible.

Replies, except those dealing with a formal search, can rarely follow a standard pattern and senior members of the staff give, as helpfully as possible, all reasonable information as to the Department's programme and its effect, if any, on the property in question.

In spite of this, cases continually occur where owner-occupiers find themselves in very difficult circumstances because proper enquiry has not been made or because the warning, implicit in the information given,

has been discounted. Enquiries made during the year were as follows :—

	<i>Enquiries</i>						<i>Houses</i>
By 'phone						1,919	4,066
By call at 67, Broad Street						1,330	1,926
By letter						6,745	10,529
						<hr/> 9,994	<hr/> 16,521

Overcrowding

There is little day-to-day evidence that any significant reduction in overcrowding has taken place in the City generally during 1958. Nevertheless, if the Registrar-General's estimated mid-year population of 1,095,000, which is 8,000 less than the estimate for mid 1957, is set against the net increase of 1,948 in the number of dwellings, it would seem that some improvement has occurred.

The figure of 1,948 additional dwellings is obtained by deducting actual or pending demolitions from the total number of new dwellings provided during the year by new construction or the conversion of existing dwellings.

New dwellings of all kinds provided during the year totalled 3,526 made up as follows :—

<i>By the Corporation</i>						<i>Dwellings added</i>
Houses and flats erected						2,411
10 houses converted to 21 flats						11
1 house of 4 flats converted to 5						1
2 houses converted to 15 bed sitters... ..						13
						<hr/> 2,436

<i>By Private Enterprise</i>						
Houses and flats erected						975
Houses converted into flats						115
						<hr/> 1,090

Against this must be set a loss of accommodation as follows :—

Redevelopment Area houses demolished or vacated therefor ...	1,251
<i>Housing Act, 1957—Part II</i>	
Demolition Orders	99
Closing Orders	2
Undertakings not to use	1
Demolition before Order made	4
<i>Clearance Areas</i>	
Demolished or vacated therefor	73
Other miscellaneous demolitions	148
	<hr/> 1,578

Overcrowding, due basically to the shortage of houses, is greatly accentuated by the uneven distribution of existing accommodation because of economic and social factors. In fact, a survey made twelve years ago showed that there would be no statutory overcrowding if the accommodation in the City were evenly distributed among its occupants.

The Housing Management Department is able, by re-arrangement of tenancies, to effect some reduction of overcrowding as houses continue to come under its management through the slum clearance programme. But operations of this kind must take account of many factors and in some of the worst cases amelioration, and not cure, is frequently the only practicable course owing to the serious shortage of large houses.

Investigations carried out by five officers of the Health Department, each attached to one of the Housing Districts, enable steps to be taken to prevent the recurrence of overcrowding in cases where it has been abated as a result of the rehousing of some of the occupants by the Corporation.

A letter sent to the landlord or the principal tenant draws attention to the overcrowding which has hitherto existed and indicates the number of occupants to which any future lettings should be restricted under Part IV of the Housing Act, 1957. This letter, of which 300 were sent during the year, is followed up by two or three visits in the ensuing twelve months.

Re-allocation among the remaining tenants of the rooms so vacated is rare, even when the landlord is willing. One reason is that increased accommodation would mean an increased rent and, equally if not more important, the improvement in his housing circumstances would mean an applicant's transfer to a less favourable position on the Housing Register and a longer wait for a house.

The "permitted numbers" of 5,980 houses were supplied to owners, agents or the Housing Management Department on request during the year and in 3,400 cases this meant a visit to check measurements. Conversion of a bedroom into a bathroom affects the number of persons permitted to occupy the house and this is one of the items to be noted if records are to be kept up to date.

PUBLIC HEALTH INSPECTION

Staff

Despite the sad loss of a district inspector through death, and the resignation of an inspector who had secured an appointment with another authority in February, there was a net gain of nine qualified inspectors available for district duties at the end of 1958 compared with the number a year previously. The services of two superannuitants were retained for a period of one year and the pupil training scheme yielded eleven newly qualified inspectors in the period.

The strength still remains below the establishment fixed in 1950, this despite many increased duties now undertaken by this section of the Department.

The actual strength of inspectors on district duties at the end of the year was :—

District Inspectors	...	...	...	9
Assistant District Inspectors	...	...	...	15
Public Health Inspectors	...	...	...	25
Pupil Public Health Inspectors	...	...	...	24

The duties under the Prevention of Damage by Pests Act, 1949, the Shops Act, 1950, the inspection of canal boats and water sampling, are carried out by inspectors who specialise in these branches of the work.

The pupil training scheme has proved its worth and the eleven men who qualified during the year were immediately appointed to the permanent staff of inspectors and, although five are eligible to do their National Service, their call-up has been deferred to enable them to take the examination for the Certificate of Meat and other Foods. Five further pupils were appointed in September, including one young lady, and commenced their training within the office.

The pupil strength at 31st December, 1958, was as follows :—

<i>Year</i>		<i>Year to qualify</i>	<i>Number of Pupils</i>	<i>Number eligible for National Service after qualifying</i>
First year	...	1962	5	2
Second year	...	1961	4	2
Third year	...	1960	9	4
Fourth year	...	1959	11	6

One fourth year pupil has temporarily interrupted his studies to do his two years National Service and one former pupil resigned.

Inspections

The total visits made by the inspectorial staff on the districts was 192,419. This includes 34,263 visits made by pupils under instruction who visited premises whilst accompanying a qualified inspector.

Comparative figures for recent years are as follows :—

<i>Year</i>									<i>Visits</i>
1954	...	...	...	...	...	...	...	...	164,536
1955	...	...	...	...	...	...	...	...	180,825
1956	...	...	...	...	...	...	...	...	186,796
1957	...	...	...	...	...	...	...	...	171,598
1958	...	...	...	...	...	...	...	...	192,419

The first six months of the year saw great activity in dealing with applications for certificates of disrepair under The Rent Act, 1957, and for a while the efforts of the inspectorial and clerical staff were fully extended. As the year proceeded, the inspectorial staff were able to return to the more normal routine inspections of food and industrial premises and the total number of visits showed an increase over previous years.

The total of visits by staff engaged on general district duties during 1958 is made up as follows :—

							<i>% of total</i>
House inspections	...	...	...	...	93,086		48.38
Inspections of food premises	...	...	...	...	7,116		3.70
Visits re infectious disease	...	...	...	...	3,065		1.59
Inspections of milk shops	...	...	...	...	2,698		1.40
Visits to school premises	...	...	...	...	36		0.02
Visits to second-hand dealers...	...	...	...	...	20		0.01
Inspections of outworkers' premises	...	...	...	...	1,413		0.73
Inspections of tents, vans and sheds	...	...	...	...	153		0.08
Inspections of stables and pigsties	...	...	...	...	446		0.23
Inspections of tips	...	...	...	...	394		0.21
Visits to burials, exhumations, etc.	...	...	...	...	39		0.02
Inspections of pleasure fairs and circuses	...	...	...	...	100		0.05
Visits re sampling of water	...	...	...	...	314		0.16
Visits re taking of rag flock samples...	...	...	...	...	57		0.03
Inspections of offensive trade premises	...	...	...	...	45		0.02
Inspections of factory premises	...	...	...	...	5,284		2.75
Inspections of surface air-raid shelters	...	...	...	...	172		0.09
Inspections of common lodging houses	...	...	...	...	206		0.11
Inspections of premises re Town and Country Planning applications	...	...	...	...	1,156		0.60
Inspections of public houses	...	...	...	...	614		0.32
Inspections of agricultural units	...	...	...	...	23		0.01
Visits by pupils under instruction by qualified inspectors	...	...	...	...	34,263		17.81
Joint visits made by qualified inspectors	...	...	...	...	1,998		1.04
Other successful visits	...	...	...	...	14,413		7.49
Unsuccessful visits	...	...	...	...	19,399		10.08
Visits to general practitioners to deliver supplies of poliomyelitis vaccine	...	...	...	...	5,794		3.01
Visits re lectures and demonstrations to visitors	...	...	...	...	115		0.06
					<u>192,419</u>		<u>100.00</u>

Total visits made by inspectors, including those engaged on certain special duties :—

Visits by public health inspectors on district	...	192,419
Visits by Shops Act inspectors :		
Conditions in shops	... ..	15,353
Hours of trading and special visits	... ..	12,615
		<hr/>
		27,968
Visits by rodent control inspectors	... ..	16,568
		<hr/>
		236,955
		<hr/>

These separate totals as percentages of the whole are as follows :—

		%
District visits	... ..	81·2
Shops Act inspectors	... ..	11·8
Rodent control inspectors	... ..	7·0
		<hr/>
		100·0
		<hr/>

Infectious Disease

A total of 3,065 visits was made by inspectors in connection with enquiries into cases of food poisoning and certain infectious diseases. These visits included those made to obtain specimens for bacteriological examination to assist the Medical Officer of Health in his investigations.

The assistance of the district inspectorial staff was enlisted in delivering to general practitioners supplies of vaccine for use against poliomyelitis. The arrangement enabled supplies to reach the doctors with the minimum of delay and involved a further 5,794 visits being made.

House to House Inspections

As in 1957, owing to the shortage of experienced qualified inspectors and the demands made on the staff by duties under the Rent Act, 1957, it was not possible to carry out inspections of houses by routine, either under Section 9 of the Housing Act, 1957, or under the Public Health Act, 1936.

Houses let in Lodgings

There are no accurate figures available as to the exact number of houses let in lodgings in the City, but the number appears to be on the increase, despite the number of new houses built. The influx to Birmingham of people from many parts of the world in search of regular employment accounts for the majority of families living in rooms or lodgings. The Housing Management Committee have found it necessary to restrict the allocation of houses to those persons who can prove they have either resided or been employed in the City for five years. Persons residing under unsatisfactory conditions frequently apply to the Housing Management Department for rehousing and it is when investigating such conditions that the Health Department becomes aware of houses let in lodgings. It is not possible with the existing staff to carry out routine investigations to ascertain the whereabouts and conditions of all houses let in lodgings.

Where conditions are found to be unsatisfactory either by reason of inadequate facilities or overcrowding, then action is taken within the limited powers of Sections 36 and 90 of the Housing Act, 1957. During the year 636 visits of inspection were made to houses let in lodgings. 72 notices were served under Section 36 of the Housing Act, 1957, requiring the provision of additional facilities and 23 under Section 90 of the Housing Act, 1957, to abate overcrowding. It was necessary to institute legal proceedings in 12 cases to enforce the requirements of the Act ; 10 in respect of lack of amenities and 2 in respect of overcrowding.

Certificates of Disrepair

The Rent Act, 1957, which came into force on the 6th July, 1957, enables a landlord of controlled houses to serve notice of increase to raise rents up to a limit set by the Act. A tenant who considers repairs are necessary can serve a notice on his landlord, and if the work is not done or a satisfactory undertaking to do the work is not received by the tenant within six weeks of the service of the notice on the landlord, then the tenant can apply to the local authority for a certificate of disrepair. Between 6th July and 31st December, 1957, 1,482 applications for certificates of disrepair were received. During the whole of 1958, 1,832 applications were received and the following figures indicate the action taken in 1958 :—

Part I—Applications for Certificates of Disrepair

1. Number of applications for certificates	...	...	...	1,832
2. Number of decisions not to issue certificates	...	...	...	6
3. Number of decisions to issue certificates	...	...	...	1,900
(a) in respect of some but not all defects	...	...	...	1,383
(b) in respect of all defects	...	...	...	517
4. Number of undertakings given by landlords under paragraph 5 of the First Schedule	...	...	...	1,683
5. Number of undertakings refused by Local Authority under proviso to paragraph 5 of the First Schedule	...	...	...	Nil
6. Number of certificates issued	...	...	...	724

Part II—Applications for Cancellation of Certificates

7.	Applications by landlords to Local Authority for cancellation of certificates	...	...	...	...	...	201
8.	Objections by tenants to cancellation of certificates...	...					53
9.	Decisions by Local Authority to cancel in spite of tenant's objections	...	...	...	...	...	17
10.	Certificates cancelled by Local Authority	...	...	...			152
	Number of visits made under the Act	...	...			4,114	
	Number of re-visits made under the Act	...	...			3,944	
	Total number of visits	...	...	...	...	8,058	

In addition to the action taken above, notices were served in appropriate cases under the Public Health Act, 1936, for the abatement of statutory nuisances. The Rent Act, 1957, resulted in many works of repair being carried out which could not have been enforced under the Public Health Act, 1936, or the Housing Act, 1957.

Rent Restriction Acts

Amendments to the Landlord and Tenant (Rent Control) Act, 1949 made by the Rent Act, 1957, makes it no longer necessary for a local authority to keep a register under the 1949 Act, but the Chief Public Health Inspector still acts as Registrar for the purpose of the Furnished Houses (Rent Control) Act, 1946.

During the year, 148 notifications were received from The Rent Tribunal, resulting in 152 entries being made in the 1946 Register. The Register was produced for inspection by members of the public on three occasions and 14 Certified Copies from the Register were issued on payment of one shilling each.

Improvement Grants

HOUSING (FINANCIAL PROVISIONS) ACT, 1958

On the 23rd October, 1958, the above Act came into force and consolidated the former legislation governing the making of improvement grants. As in the previous year, delegation by the City Council of legislation relating to the making of grants was to the House Building Committee in respect of applications received from owner-occupiers and to the Health Committee in respect of applications received from landlords.

Although there was a substantial increase in the number of applications from landlords for grants to assist them in improving their properties, it is considered that many more landlords will need to avail themselves of the advantages of the scheme if any real progress is to be made in the provision of bathrooms and other amenities in sub-standard properties.

Comparative figures for applications received from landlords for improvement grants in the years 1957 and 1958 are as follows :—

	<i>Improvement</i>		<i>Conversions to flats, etc.</i>	
	<i>1957</i>	<i>1958</i>	<i>1957</i>	<i>1958</i>
Applications from landlords	63	99	8	24
Number of houses affected	78	114	12 houses to 44 flats	24 houses to 78 flats
Number of houses where “ life ” was suitable ...	75	113	12	24
Number of houses where “ life ” was unsuitable	3	1	—	—
Number of houses for which grant approved (including five outstanding from previous year)	78	84	12 houses to 44 flats	17 houses to 61 flats
Number of houses where work completed	73	73	4 houses to 12 flats	12 houses to 36 flats
Total grant aid approved	£4,027 17 4	£9,461 19 0	£64,57 10 0	£12,846 0 0
Applications withdrawn prior to approval ...	5	13	—	6 houses to 16 flats
Applications withdrawn after approval	4	2	1 house to 2 flats	1 house to 2 flats
Applications still under consideration at end of year	10	12	—	4 houses to 7 flats

Since matters relating to the making of improvement grants largely concern the condition of dwelling houses, at the close of the year representations were being made by the Health Committee and the House Building Committee to the City Council for a change in delegation, and early in the new year the City Council resolved that all applications for improvement grants, whether they be from landlords or owner-occupiers, should be dealt with by the Health Committee.

Abatement of Nuisances

The wide powers of the nuisance sections of the Public Health Act, 1936, are found invaluable in dealing with defects and conditions which arise in any part of the City and in almost any type of premises. Any complaint which is received in the Department of conditions which may come within the loose definition of public health nuisance is investigated and, where appropriate, action is taken within the powers conferred on the Health Committee. The majority of complaints are received from occupiers of dwelling houses but action is frequently taken following an inspection of land or premises for other purposes. For example, a statutory notice may be served requiring an owner of property to remedy defects which are causing nuisance, even though the original inspection was made under The Rent Act, 1957. Of the 10,064 statutory notices

served during the year, 7,458 notices were served under Section 93 of the Public Health Act, 1936.

The average time taken for compliance with an abatement notice was two months and 22 days. This shows an increase compared with the last two years as follows :—

1954	...	...	...	...	...	...	2 months 16 days
1955	...	...	...	...	...	...	2 months 23 days
1956	...	...	...	...	...	...	2 months 3 days
1957	...	...	...	...	...	...	2 months
1958	...	...	...	...	...	...	2 months 22 days

There are a number of reasons which might account for the longer interval between service and completion of the notice. One may be the pressure of work on the inspectorial staff brought about by the Rent Act, 1957, which made rapid action less possible. Builders received orders from landlords involving heavier schedules of repairs on many houses following action by tenants under The Rent Act, 1957, and consequently work tended to be done in rotation and less priority was given to statutory notices. The weather during the year seemed to be particularly unfavourable for the execution of outside work.

One thing was certain, more legal action was necessary during the year than in 1957 to enforce the requirements of the notices.

The total of 10,064 statutory notices is made up as follows:—

Nuisances under Section 93 of the Public Health Act, 1936—							
dealing mainly with roofs, spoutings, fallen plaster, defective floorboards, broken sashcords and window frames	...	...	...	...	...	...	7,458
Stopped up drains, soil pipes, water closets and private sewers, dealt with under the Birmingham Corporation Act, 1946, as amended by the 1954 Act	...	...	...	...	...	...	1,163
Urgent nuisances, badly leaking roofs, broken water closet pedestals, etc., dealt with under the Birmingham Corporation Act, 1948	...	...	...	...	...	...	476
Provision or improvement of piped water supply—Section 138, Public Health Act, 1936, as amended by Section 30, Water Act, 1945	...	...	...	...	...	...	234
Yard paving and drainage—Section 56, Public Health Act, 1936	...	...	...	...	...	...	206
Unsatisfactory drainage—Section 39, Public Health Act, 1936	...	...	...	...	...	...	374
Filthy or verminous premises—Section 83, Public Health Act, 1936	...	...	...	...	...	...	15
Additional water closets—Section 44, Public Health Act, 1936	...	...	...	...	...	...	1
Conversion of closets—Section 47, Public Health Act, 1936	...	...	...	...	...	...	—
Byelaw infringements—nuisances	...	...	...	...	...	...	5
Provision of sanitary accommodation—Section 39, Birmingham Corporation Act, 1935	...	...	...	...	...	...	29
Removal of noxious matter, Section 79, Public Health Act, 1936	...	...	...	...	...	...	...
Houses let in lodgings—fitness for occupation by families, Section 36, Housing Act, 1957	...	...	...	...	...	...	72
Houses let in lodgings—prevention of overcrowding—Section 90, Housing Act, 1957	...	...	...	...	...	...	23
							<u>10,064</u>

To enforce the requirements of the abatement notices it was necessary to serve 769 summonses during the year. Figures for recent years were :—

	<i>Summonses served</i>							
1955	1,442
1956	672
1957	316

In many cases the necessary work was in hand or completed before the date of hearing and in the circumstances Nuisance Orders were made by the Magistrates in 140 cases.

<i>Summonses taken out during 1958 :—</i>								<i>Total fines imposed</i>		
								£	s.	d.
General nuisances	...	...	...	...	769			—	—	—
Dogs fouling footway	...	...	...	...	6			4	0	0
Contraventions of Shops Act, 1950	...	...	...	...	15			29	0	0
Food Hygiene Regulations, 1955	...	...	...	...	35			45	0	0
Contraventions of Section 36, Housing Act, 1957	...	...	...	...	10			88	4	0
Contraventions of Section 90, Housing Act, 1957	...	...	...	...	2			11	4	0
Contraventions of Section 154, Public Health Act, 1936 (rag collectors)	...	...	...	...	8			10	0	0
Furnished Houses (Rent Control) Act, 1946	...	...	...	...	1			10	0	0
Sanitary Accommodation Regulations (Factories Act, 1937)	...	...	...	...	1			10	0	0
					<u>847</u>			<u>£207</u>	<u>8</u>	<u>0</u>

Enforcement Section

This section is responsible for arranging the execution of all works carried out to comply with Statutory Notices served by the Department under the Public Health Act, 1936, and associated Acts at the request and default of owners, owner-occupiers and occupiers, and also the requirements of Nuisance Orders and Magistrates' Orders, made by the City Justices at Victoria Law Courts where these Orders have not been complied with by the persons concerned.

Another important function of this section is the institution of all legal proceedings undertaken by the Chief Public Health Inspector's section in conjunction with the Town Clerk's Department. This involves the collection of all relevant information and the careful preparation of evidence necessary for prosecutions. Legal proceedings were instituted during the year in 847 instances and the summonses issued and the fines imposed are set out above.

The type of general building work detailed by this section varied from minor items of general repair which included renewal of sashcords, replacement of missing slates and tiles on roofs, renewal or repair of eaves guttering and plaster repairs to walls and ceilings, to more comprehensive

items of work which included extensive roofing repairs, repairs to chimney stacks and brickwork of walls.

Works involving provision of internal water supplies and improvement of existing supplies, often of a complex nature, have been executed and paving work to approaches to houses in tarmacadam and with concrete paving slabs have also been arranged.

The method of carrying out these works in accordance with specifications has been on a day work basis by labour and materials plus costs to include overheads as set out in the National Schedules of Day-work Charges for General Building Work.

It has been found from experience that this method of execution of repairs and improvements is the most practical and economical and results in the work being carried out without any undue delay.

The prompt and satisfactory manner in which works required by Statutory Notices and Nuisance Orders were executed at reasonable cost, and that supervision by an inspector while the work was in progress ensured that the repairs were satisfactorily carried out, gave owners confidence in the service provided by the Department and resulted in numerous requests being received for assistance.

This particularly applied where works were of a difficult nature and when more than one owner was affected. Where costs had to be apportioned between the owners concerned, the apportionment of such costs by this Department was usually accepted without question.

To defray part of the administrative costs an Establishment Charge of 5% is now made on all works carried out and this is included in the statutory demands submitted to owners for payment.

During the year 150 specifications involving 368 houses were prepared and the total cost of works carried out was £4,271 11s. 6d. Of these, 94 specifications were prepared for execution of building repairs to abate nuisances at 154 houses at a cost of £2,973 14s. 11d.

Repairs and improvements to 227 houses were carried out at the request of the owners which necessitated the preparation of 97 specifications at a cost of £2,851 12s. 8d. and in 53 cases works were carried out at the default of owners at a cost of £1,419 18s. 9d. with respect to 141 houses.

In 22 instances essential repairs were carried out to comply with Nuisance Orders made by the City Justices at Victoria Law Courts. The cost of this work totalled £738 8s. 5d. and the number of houses involved was 36.

The following analysis indicates the work undertaken by the section during 1958 :—

	<i>Jobs</i>	<i>Houses</i>	<i>Cost</i>		
			<i>£</i>	<i>s.</i>	<i>d.</i>
<i>Section 93 Public Health Act, 1936.</i>					
<i>General Nuisances—repairs to defective houses.</i>					
At default of owners—for non-compliance with Nuisance Orders	22	36	738	8	5
By agreement	72	118	2,235	6	6
<i>Section 56 Public Health Act, 1936.</i>					
<i>Paving of courts, yards and passages.</i>					
At default of owners	4	21	163	6	6
By agreement	4	45	237	18	4
<i>Section 39 Public Health Act, 1936.</i>					
<i>Provision of satisfactory drainage.</i>					
At default of owners	17	46	121	15	10
By agreement	12	45	50	5	7
<i>Section 79 Public Health Act, 1936.</i>					
<i>Removal of noxious matter from premises.</i>					
At default of owners	2	9	12	12	0
<i>Section 138 Public Health Act, 1936</i> <i>(as amended by Section 30, Water Act, 1945). Houses already having internal water supply but where supply was insufficient—improvement effected.</i>					
At default of owners	7	26	349	18	0½
By agreement	9	19	328	2	3½
<i>Section 4 Prevention of Damage by Pests Act, 1949</i>					
At default of owners	1	3	33	18	0
	<hr/> 150	<hr/> 368	<hr/> 4,271	<hr/> 11	<hr/> 6

Power to execute works to comply with Statutory Notices is given by Section 275 of the Public Health Act, 1936, where work is carried out by agreement with owners or occupiers of premises and Section 291 of the same Act allows the recovery of the cost of works carried out by instalments spread over a period of years.

Many owners experience financial hardship in meeting the costs of repairs to property and, in requesting the Department to carry out works required, also request financial help to meet the costs incurred and readily accept the Committee's conditions with respect to repayment.

The policy of the Health Committee is normally to accept offers of repayment of costs within a period not exceeding three years although, in exceptional cases of financial hardship, this period may be extended.

During the year 68 owners requested financial assistance from the Committee under this scheme to meet the cost of works carried out on their behalf.

In recovering these costs, 22 sealed instalment orders were made by the Town Clerk and agreements for payment by instalments were arranged by the Secretary-Accountant in 35 cases. Collection of rents was undertaken in seven instances and formal action was taken in the County Court in four difficult cases.

Urgent Nuisances

As in previous years great benefit was derived by both landlord and tenant from the use of the special powers for dealing with urgent nuisances contained in Section 59 of The Birmingham Corporation Act, 1946, as amended by the Act of 1954, and Section 32 of the Birmingham Corporation Act, 1948.

After service of notice the Corporation is empowered to enter and do work, if urgent work remains undone after a short specified period of time. Provision is made for the recovery of costs incurred.

Particulars of notices served and actions taken are as follows :—

Birmingham Corporation Act, 1946—Section 59.

Total number of notices served during 1958	...	...	...	1,163
(involving 986 jobs)				
Work carried out by owners in specified time	...	...	...	533
Orders given by this Department in default of owners' compliance	...	...	...	392
Orders given by this Department at request of owners	...			61
Total cost of work given to the Department's contractors				
totalled	...	...	...	£1,237 19 1
Average cost per job	...	...	...	£2 14 8
The maximum charge in respect of any one job was	...	...	...	£66 4 8
and the minimum was	...	...	...	7 4

During the year notices were served in respect of obstructions in 14 private sewers affecting 169 houses.

Birmingham Corporation Act, 1948—Section 32.

Total number of notices served during 1958	...	...	...	476
(involving 466 jobs)				
Work carried out by owners in specified time	...	...	...	308
Orders given by this Department in default of owners' compliance	...			147
Orders given by this Department at request of owners	...			11
The cost of the work given to the Department's contractors				
totalled	...	...	...	£1,107 8 0
Average cost per job	...	...	...	£7 0 2
The maximum charge in respect of any one job was	...	...	...	£39 6 6
and the minimum was	...	...	...	9 2

Redevelopment Areas and Clearance Areas

The Corporation acquired some 30,000 unfit houses in the Central Redevelopment Areas declared under the provisions of the Town and Country Planning Act, 1944, and in addition by the end of December, 1958, a further 6,075 unfit houses had entered into Corporation management following slum clearance action under the Housing Acts. The Housing Management Department has undertaken a vast programme of works designed to make the houses adequate for the time being, until demolition can follow the rehousing of the tenants.

The rate of building of new houses is an important factor in the rate of rehousing and many families will be forced to live in these unsatisfactory conditions for a number of years. The age and character of the houses is such that, even after considerable sums have been spent on them in reconditioning, nuisances are bound to arise. The occupiers wishing to complain of defects do so, sometimes direct to the Housing Management Department and at other times to the Health Department, especially when they feel that insufficient attention has been given to their complaints by the former, or when they are trying to bring pressure to bear to hasten the process of their own rehousing.

During the year, 2,605 complaints were received in the Department in respect of property managed by the Housing Management Department and 21 in respect of property known to be managed by the City Estates Department. Of these complaints, 1,175 were investigated by the health inspectors before being passed to the Housing Management Department for attention; the remainder were passed on direct as it was apparant these complaints should have been made to the Housing Manager in the first place. 1,114 Preliminary Notices were sent to the Housing Manager during the year and appropriate follow up action was taken in the interests of the public health and the tenants.

Burial of the Dead and Exhumations

The Home Office notify the Medical Officer of Health whenever a licence is given for the removal of human remains from a grave within the City. A public health inspector attends so as to be in a position to take any action which may appear necessary in the interests of public health. Remains covered by one licence issued in 1957 and eight issued during 1958 were removed and reinterred.

Visits are also made in respect of the depth of graves in certain burial grounds not in the Corporation control. 39 visits were made during the year.

Domestic Surface Air Raid Shelters

Arising out of the survey carried out in 1954, further consideration was given during 1958 to numbers of shelters which had been the subject

of complaints received in the Department. In 116 cases it was considered that the amenities of nearby dwelling houses were so disturbed as to constitute a danger to health and therefore to warrant representation being made for the demolition of the shelters. The total number of shelters represented for demolition since the survey began was brought up to 481 at the 31st December, 1958 as follows :—

				<i>Total shelter structures surveyed</i>	<i>Shelters represented for demolition</i>
Central Wards	...	...	...	822	168
Middle Ring Wards	...	...	...	1,211	256
Outer Ring Wards	...	...	...	2,001	57
				<hr/> 4,034 <hr/>	<hr/> 481 <hr/>

Common Lodging Houses

Every local authority is required to maintain a register of all established common lodging houses within their district in accordance with the provisions of Section 237 of the Public Health Act, 1936. This register contains entries giving the full names and addresses of all persons registered with the Department as “keepers” and “deputy keepers.” In addition, information is recorded as to the location of every such lodging house, including the maximum number of persons which each may accommodate.

No further change has occurred in the number of common lodging houses established in the City for 1958, the figure remaining at 10 and providing total accommodation for 727 men.

Conditions at these houses are controlled by bye-laws and routine visits are carried out by public health inspectors, both by day and night, to ensure that no infringements of the Public Health Act, 1936, or bye-laws occur.

During the year 206 visits were made as follows :—

Day visits, 53 ; Night visits, 125 ; Special visits, 25 ; Unsuccessful visits, 3.

The above inspections revealed only minor contraventions of the byelaws, details of which were immediately reported to the deputy keepers at the time of visit. Letters of confirmation were also sent by the Department in all such cases to the respective registered keepers and in no instance was it necessary to resort to statutory action.

Tents, Vans and Sheds

The presence of occupied caravans on sites within the City is reported to the City Engineer and Surveyor, together with observations as to the suitability of sanitary arrangements, so that appropriate action may be taken within the powers delegated to the Public Works Committee under Section 43 of the Birmingham Corporation Act, 1935.

One site which is considered to be unsatisfactory and which has been occupied by about ten caravans has been the subject of an application to the Minister of Housing and Local Government for a Compulsory Purchase Order. The site is required for housing development and the Order was confirmed by the Minister in March, 1959.

During the year, 153 visits were made by public health inspectors to sites occupied by caravans, but since the provisions of Section 43 of the Birmingham Corporation Act, 1935, have been rigidly enforced, there has been no serious threat to public health from the occupation of caravans within the City.

Agriculture (Safety, Health and Welfare Provisions) Act, 1956

The above Act, passed in 1956, placed the duty upon the local authority to secure the provision of satisfactory sanitary conveniences in agricultural units which, broadly speaking, include farms or any land on which produce is grown for sale or for consumption, such as market gardens and nursery grounds.

On the passing of the Act a schedule of such premises was prepared and visits were carried out to ensure that the requirements of the Act were complied with.

The number of premises in the City known to the Department is 65, and during 1958, 23 visits were made to this class of premises for the purposes of the Act.

Offensive Trades

A fairly reliable guide as to the satisfactory and efficient conduct of any business, trade or process is found in the record of complaints. A better example of this than the conduct of the City's Offensive Trades would be difficult to give and it is with great satisfaction that during the past twelve months, one complaint only was received in the Department regarding an offensive trade.

This state of affairs, while possibly due to several factors, in all probability is the direct result of a greater degree of co-operation between all concerned.

The proprietors of offensive trades are very much aware of their responsibilities under the relevant byelaws, and it must be said to their credit that, generally speaking, a suggestion for an improvement here or there is accepted and adopted.

Occasionally it is found that a general objection rather than a specific complaint is made regarding an offensive trade—this being a most unrealistic approach to the matter. In spite of existing byelaws or any which may come in the future, any offensive trade is, as its designation states, "offensive" and it is impossible to expect it to be anything akin to a beauty parlour. This, however, neither implies nor suggests

that any haphazard methods or flouting of the byelaws meet with official tolerance. If such were the case, it would be inconceivable that one solitary complaint would be made during the course of a whole year.

During 1958 public health inspectors made 45 visits to offensive trades premises but no statutory action was necessary.

There were 18 offensive trades premises registered in the City in 1958.

Pig Keeping

In the Report for 1957 it was said that pig keeping caused very few complaints during that year and the last twelve months have produced a similar result.

There are indications that the number of domestic pig keepers—having one or two pigs only—is decreasing and, generally, it is this type of keeper that is the subject of complaint. More often than not his nearest neighbours object and make or find grounds for complaint. It often happens he is not sufficiently careful regarding cleanliness, the condition of the sty or the storage and cooking of feeding stuff and in each case conditions tend to deteriorate rather than improve. It is for this reason that regular routine visits are made regarding pig keeping, the object being to maintain satisfactory conditions rather than to assume them until a complaint is received.

During 1958, 446 visits were made and in five cases notices were served under the Byelaws for nuisances arising from the keeping of pigs.

Tips and Tipping

The number of established tips in the City was reduced to 13 during the year when a notice was served under the City Byelaws calling upon operators to cease tipping at one site. A number of complaints had been received during the latter end of 1957 and it had become clear that further tipping would only aggravate the matter. While the tip operators accepted the position, opposition was forthcoming from the owner of the land but this, however, was finally overcome without resort to legal proceedings.

During May the local press reported a “war” being waged by housewives in the north of the City who picketed the approaches to one tip and successfully prevented vehicles entering. Female wrath had apparently been roused by the sudden use of the site for the disposal of large quantities of untreated household refuse by the City’s Salvage Department. The land was owned by the Corporation and had hitherto been used solely for the tipping of road excavation and other innocuous materials. This Department had no fore-knowledge of the intention to tip untreated domestic refuse but, when complaints were received, visits were made and tipping was found to conform well to the requirements of the City Byelaws. However, in the face of the organised

feminine concern shown, it was agreed that only burnt rubbish should be deposited in future and the "war" ended with happy housewives!

Apart from these cases complaints have been few and prompt approach to tip operators has obtained the abatement of any nuisances involved.

It must again be recorded that the habit of the public in discarding unwanted articles and rubbish on vacant sites and unused land still continues although complaints are lessening with the gradual development of such sites for useful purposes.

Among the articles discarded on vacant sites are often old vehicles in the tanks of which small quantities of petrol have remained. Incidents of children playing with those vehicles have arisen involving serious accident through fire or explosion. To prevent this the Corporation have sought and been granted powers under Sections 31 and 32 of the Birmingham Corporation Act, 1958, to examine and prevent danger from such sources. The Act also makes it an offence for any person to dispose of any container which has been used for the storage of inflammable or explosive substance unless all steps have been taken to prevent danger.

Pleasure Fairs

With the progress of the City's house building programme, many sites and plots of land, which in recent years have been utilised for pleasure fairs, have been absorbed and developed by the erection of new buildings. The effect has been that, during 1958, there were slightly fewer fairs held within the City boundary.

The larger type of pleasure fair continues to visit the City periodically and would seem to attract a degree of patronage. This may be due partly to the fact that greater support of fewer fairs can be anticipated, but there is little doubt that the small fairs have lost appeal, lacking in attraction.

Flower shows, garden fetes and similar functions, many of which are subject to the City's Pleasure Fairs Byelaws, tend to increase in number and present some slight difficulty inasmuch as their very short duration—usually one or half a day—is not helpful when Byelaw contraventions are observed. In such instances revisits are seldom possible.

The Byelaws require that three days' prior notice in writing is to be given to the Town Clerk and Chief Constable of an intention to hold a pleasure fair, but it is to be emphasised that such notification is quite separate from the application to the magistrates for a music licence. The latter procedure often forewarns this Department in cases where the three days prior notice is not given earlier, through the liaison in this matter with the Surveyor to the Justices.

During 1958, a total of one hundred visits was attained in respect of pleasure fairs but not in a single instance was it necessary to serve a notice for contravention of the Byelaws.

During the course of inspection of fair sites it is customary to inspect food stalls to ensure that the Food Hygiene Regulations are being observed. Some resistance was at first met with from proprietors of such stalls, but there has been a steady improvement in standards in recent years.

Canal Boats

During the year 1958, the number of boats inspected on the canals within the City area was 572 and the number of inspections each quarter is shown as follows :—

First quarter	...	...	245
Second quarter	...	...	159
Third quarter	...	...	97
Fourth quarter	...	...	71
			<hr/>
			572
			<hr/>

It should be noted that, although the same number of visits was made to the wharves as in previous years, the number of boats inspected was below the usual figure due :—

- (a) to a general falling off of the amount of goods being brought to and carried from the City, and
- (b) major stoppages outside the City from strikes and repair works to locks and canal banks.

The 572 boats inspected were registered for the accommodation of 1,604 persons and when inspected were found to be carrying 321 men, 294 women and 190 children, a total of 805 persons—represented in terms of adults as 710.

Of the 572 boats inspected during the year it was found that 557 or 97·4% were in good condition, and conforming with the Public Health Act, 1936, and Canal Boat Regulations, while in 15 or 2·6% of the total, various contraventions were found. These are classified thus :—

Boats with one contravention each, 7 making total contraventions	...	7
Boats with two contraventions each, 8 making total contraventions	...	16
		<hr/>
		15
		<hr/>
		23
		<hr/>

Complaint notes were duly served on the owners in all cases, except for a verminous boat which was disinfested by the Authority. 14 complaint notes were issued during 1958 and 15 brought forward from 1957. 12 complaint notes were complied with during the year, leaving an outstanding balance of 17.

During the year certificates were returned by owners signed by the various Canal Boat Inspectors, showing that 16 contraventions had been remedied. It has not been necessary during the year to take any court proceedings under the Public Health Act, 1936, or the Canal Boat Amendment Regulations, 1925.

No cases of infectious disease were reported during the year 1958.

The number of boats registered in Birmingham is 96, classified as follows :—

Motor boats	57	Ordinary boats	39
-------------	-----	-----	-----	----	----------------	-----	-----	----

The number of boats shown as registered in Birmingham has fallen considerably during the last three years from 486 in 1955 to 96 in 1958, This is due to :—

- (a) A drastic pruning of the Canal Boat Register to cancel the registration of boats which are no longer in commission having, in most cases, been either broken up for scrap or converted to other uses, i.e. pleasure boats, or
- (b) To the transfer of registration of a large number of boats formerly registered with Birmingham, to another local authority. This transfer was made at the request of the British Transport Waterways.

Prevention of Damage by Pests Act, 1949

The Prevention of Damage by Pests Act, 1949, placed upon a local authority the duty of securing, so far as is practicable, that their district is kept free from rats and mice. The Act also requires owners and occupiers of premises to notify the local authority where rats or mice are found to be infesting premises or land in substantial numbers. Powers are given to the local authority to require the owner or occupier of land or premises to take appropriate steps to rid the premises of such rodents.

The number of complaints received in the Department during the year showed a slight increase on that of the previous year. For the purpose of comparison figures are given for recent years and also for the year 1950—the first full year after the Act came into force.

1950	1954	1955	1956	1957	1958
4,843	7,409	8,889	8,090	7,235	7,351

Each complaint is investigated by the Rodent Control Section and, in an endeavour to trace the source of the infestation, it may be necessary to inspect a number of adjoining premises in addition to that to which the complaint refers.

The number of inspections carried out by the Section during 1958 is the highest for some years as will be seen from the following figures :—

1955				<i>Domestic</i>	<i>Industrial</i>	<i>Total</i>
Original visits	...	...	...	9,067	3,208	} 15,784
Re-visits	...	...	...	1,796	1,713	

1956						
Original visits	...	...	...	9,020	3,131	} 15,183
Re-visits...	...	...	...	1,811	1,221	

1957						
Original visits	...	...	...	8,473	2,886	} 14,280
Re-visits	...	...	...	1,767	1,154	

1958						
Original visits	...	...	...	9,792	2,809	} 16,568
Re-visits	...	...	...	2,286	1,681	

It is seldom that a complaint relates to the presence of rats or mice in substantial numbers ; the majority of complaints relate to the odd rat which has been seen or heard. This is a very different state of affairs from that which existed but a few years ago. Nevertheless, rodents are to be found in all parts of the City and are not respectors of district or type of property, large or small, old or new, and if the organised control were to be relaxed, it is more than probable that the rodent population would multiply rapidly and once more present a menacing problem.

The policy of rat-proofing property wherever possible continues to be fully justified, although the implementation of this policy puts a heavy burden on the officers who have specialised knowledge and experience of this class of work. It is one thing to destroy rats in premises, but far more skill is involved in suggesting and supervising appropriate works to prevent further infestation and thus save valuable stocks from damage or destruction by these pests.

The class of premises visited and treated varies considerably and figures for the year are given below :—

				<i>Inspections</i>	<i>Re- inspections</i>	<i>Treatments for Rats</i>	<i>Mice</i>
Domestic and bombed sites	...			9,792	2,286	4,348	1,193
Corporation Properties :							
Schools	...	...	...	159	62	85	108
Civic restaurants and bake-							
houses	...	...	...	12	6	9	10
Corporation tips	...	...		7	21	5	—
Allotments, parks, etc.				34	41	21	3
Welfare centres and nurseries				45	15	21	18
Destructors	...	...	...	—	183	—	—
Offices, stores, depots, etc.				55	58	35	19
Industrial :							
Private schools	...	...		22	26	19	8
Private tips	...	...	...	2	2	—	—
Hospitals, nursing homes, etc.				36	67	49	31
Cafes, restaurants and hotels				89	40	44	28
Other food premises	...			764	468	337	253
Cinemas and theatres	...			12	77	6	9
Canal and railway banks	...			21	56	1	—
Non-food shops	...	...		290	129	125	81
Non-food factories, offices, etc.				784	405	494	222
Farms, piggeries, etc.	...			10	25	4	—
Other visits	...	...	...	467	—		
Night visits	...	...	...	150	—		
Smoke tests	...	...	...	291	—		

These visits resulted in formal action in the following cases :—

Notices served for proofing	51	Reminder letters sent	... ..	1
Notices served for treatment	—	Letters sent re proofing	... ..	1
Notices completed	... ..	45		

It is not usual to serve notice to require an owner or occupier to take steps to rid the premises of rats or mice. Treatments are carried out usually by poison bait methods in accordance with advice by the Ministry of Agriculture, Fisheries and Food. A charge is made in the case of business premises but purely domestic premises are treated without charge.

The scheme devised to give regular treatment of business premises at pre-arranged intervals has continued to work well. In a number of cases it has been possible to lengthen the interval between treatments and in others it has been possible to dispense with regular treatment, the Section being prepared to give necessary attention when called upon.

RAT PROOFING OF PREMISES

Considerable progress has been made in the proofing of premises. Most of the work has been carried out without formal action being necessary. In only 51 cases during the year was it necessary to take formal action under Section 4 of the Act and in many of these cases the

notices were requested by agents to confirm action agreed between them and the Department.

There were 197 properties proofed without service of notice. The figures do not truly represent the benefit which is to be derived from this work as in many cases a defect proves to be the source of infestation of a number of properties in the area.

Defective and disused drainage systems continue to give rise to a large number of rat infestations, particularly in the older parts of the City, and, as one such defective drain can give rise to infestations in several properties, the actual benefit from the repair of such a drain cannot be assessed in relation to the number of properties.

It is a matter of considerable concern that carelessness in the course of building operations still accounts for a very large number of infestations within buildings—both old and new. Much valuable time has had to be spent in the last year in tracing the source of infestations in newly constructed and occupied flats and houses built for the Corporation. Forethought and strict supervision in the course of construction could have prevented a number of infestations by rats and considerable expenditure in measures necessary to proof the premises, quite apart from the inconvenience and disturbance caused to the occupiers.

INNER RING ROAD SCHEME

It was expected that the wholesale demolitions taking place in the centre of the City would lead to some disturbance of the rat population, and, although this has occurred to some degree and given rise to infestations in some adjacent properties and on the scheme itself, there has been no undue or exceptional rise in infestation in the area which could be attributed directly to the scheme. A close watch is kept on the area, both as properties are demolished and as the scheme develops. Some of the demolition contractors are extremely rat conscious and, after discussions, have agreed to notify the Section of any infestations in buildings which they are to demolish so that the necessary poison treatment can be given before the demolition takes place.

CITY MEAT MARKET

For some years regular inspections have been carried out at monthly intervals and, when found necessary, treatments have been arranged. The population of rats is now small and scattered, which contrasts favourably with the situation existing when the Section assumed responsibility for the rodent control at the market.

It is pleasing to record the high standard of co-operation which exists between the Section and the General Manager and his staff at the Markets and Fairs Department. Any suggestions as to steps which should be taken in order to reduce the rat population are promptly acted upon.

SALVAGE DEPARTMENT DESTRUCTORS

The five depots belonging to the Salvage Department continue to have the heaviest rat infestation in any type of premises in the City. The present rat populations are infinitely smaller than those of some few years ago when literally thousands of rats could be seen at any time after working hours ; nowadays the population is countable in dozens, whilst in some portions of the depots rats are never seen at all.

The hoppers and firing decks are the main centres of infestation, although efforts have been made by the engineering staff of the Salvage Department to eliminate a considerable amount of rat harbourage on the decks, in the manner suggested by the officers of this Section. These alterations have made a substantial difference to the numbers of rats that can live on these decks.

Operations against rats have been unceasing for a number of years, and it is now possible to see the results of these labours. Most of the Section's work has of necessity to be carried out at nights and week-ends in the depots, whilst the main poisoning campaigns in the depots have to be carried out over the Easter, Whitsun and August holiday periods. It is only at these latter times that at least three days pass without very much refuse being taken into the depots, and thus the normal available food for the rats is at a premium, and there is considerably more possibility of the rats taking the poison.

Opportunity is also taken for individual poison treatments to be undertaken whilst each charging deck is taken down for repair, and before the resident rat population have time to migrate in search of adequate food supply ; this procedure occurring in each depot. Additionally, the two outlying depots at Lifford and Tyseley are treated during working hours as opportunity arises, these treatments being limited to the banks of streams and open ground around the depots.

The Section enjoys the closest possible co-operation with the officers and staffs of the various depots and the Salvage Department generally, and suggestions regarding rat-proofing are readily carried out.

SEWER TREATMENTS

It is more than possible that the heaviest rat populations anywhere in the country are to be found in the sewers of the towns and cities, Birmingham being no exception. It is believed that the City's sewers, which total more than 1,600 miles in length, represent the largest single installation in the country, and give some idea of the magnitude of the problem.

The only possible points on the sewer systems where rats can be baited and poisoned are at the access manholes and, although many of the manholes are now showing " no takes," it is a complete fallacy to assume

from this fact that the particular sewer has no rat population. There are many instances where the manholes are over 400 yards apart, thus giving a 400 yard run of sewer between the manholes to which there is no access. It is known that the rats living in between such points do not, normally, "migrate" very far from their usual haunts in such circumstances, because of the ample food supply available to them in the sewer.

These facts only serve to emphasise the difficulties of rodent control as applied to the sewers, and when it is realised that practically every report and complaint of rat infestation which occurs within a three mile radius of the City centre can be traced back to a defective drainage system, then the importance of continued sewer baiting will appear in the right perspective.

It is only the continued baiting and poisoning which keeps the sewer rat population within bounds, and a great deal of research is taking place in an effort to overcome the problem of the sewer rat, not only in this country but abroad.

During the year the 22nd and 23rd maintenance treatments were completed and at the close of the year the 24th maintenance treatment was continuing.

An examination of the following figures will show the effect of the treatments on the sewer populations near manholes ; in this case judged solely by the reduction in the "takes" of bait and poison.

	<i>Quantity of Bait taken</i>					<i>No "takes"</i>
	<i>Complete</i>	<i>Good</i>	<i>Small</i>	<i>Totals</i>		
Initial treatment 1944	246	2,227	2,368	4,841		4,734
23rd maintenance treatment	—	188	504	692		4,286

Since the inception of the scheme, it has been possible for many sewer lengths in the City, particularly those in the suburbs, to be taken off the baiting routes and a considerable alteration in the routes made.

STAFF

The staff numbers, over the years, have remained fairly constant and at December 31st, 1958, there was a total of 36 comprised as follows :

Rodent Officers	...	...	3	Foremen	...	...	...	2
Clerks	...	...	3	Operatives :				
Storeman	...	...	1	Surface	...	...	...	14
Inspectors	...	...	7	Sewer	...	...	...	6

The Rag Flock and other Filling Materials Act, 1951

At the end of 1958 there were six premises licensed under the above Act, all for storage of rag flock. 56 premises were registered for the manufacture of new furniture, bedding or stuffed toys.

Regular routine sampling is carried out of materials to which the Act applies, which are stored or used on registered or licensed premises.

Samples of the following materials, 84 in all, were taken and from all a satisfactory report was received.

1. Rag flock	...	...	31	6. Hair	...	...	...	8
Washed flock	...	...	—	7. Feathers or down	...	...	...	1
2. Cotton felt	...	...	16	8. Kapok	...	...	...	—
Cotton millpuff	...	...	1	9. Coir fibre	...	...	...	16
3. Woollen felt	...	...	5	Algerian fibre	...	...	...	2
Woollen flock	...	...	—	Fibre (not classified)	...	...	...	1
4. Jute	...	...	2	Grey wadding	...	...	...	1
5. Synthetic fibres	...	...	—			

Of 93 samples taken in 1957, seven were unsatisfactory.

The results of samples taken during 1958 are most encouraging, this being the first year since the passing of the Act in 1951 when all samples satisfied the standards of cleanliness laid down in the Regulations.

Unsatisfactory samples taken, expressed as percentages of all samples for the year, were as follows :—

1952	...	...	...	...	...	...	...	16.3%
1953	...	...	...	...	...	...	...	6.5%
1954	...	...	...	...	...	...	...	6.2%
1955	...	...	...	...	...	...	...	12.6%
1956	...	...	...	...	...	...	...	2.0%
1957	...	...	...	...	...	...	...	7.0%
1958	...	...	...	...	...	...	...	Nil

Supervision of Shops

A staff of four whole-time Shops Act Inspectors was available to carry out the general routine inspections and the various other duties relating to the retail distributive trade as prescribed by the provisions of the Shops Act, 1950.

The duties include :—

General Inspections.— Periodical inspection and recording of the necessary particulars of all retail shops, certain wholesale establishments and warehouses.

Conditions of Employment, Assistants—Regular examination of the prescribed records relating to statutory weekly half-days, hours of employment on Sundays and compensatory time off in lieu of Sunday employment. The checking of the regulated hours of employment of young persons employed in retail shops, cinemas and other places of entertainment and in the catering trade.

Visits to ensure that the correct intervals for meals are allowed to all shop assistants.

Staff Accommodations—Inspections to ascertain that a suitable standard is provided and maintained for sanitary accommodation and washing facilities made available for use by the staff ; that a reasonable standard of heating, lighting and ventilation is

maintained at all times where staff are employed ; to ensure that seating is made available for female staff and that suitable facilities are available for the taking of meals on the premises.

Early Closing Day and Night Closing Regulations—Regular routine patrols are made to ascertain that the regulations regarding compulsory half-day closing and general night closing hours are complied with by shopkeepers.

Sunday Trading—Regular routine patrols are made enforcing the limitations of Sunday trading exemptions ; the special provisions for Jewish traders and the City of Birmingham (Rednal) Sunday Trading Order, 1939.

The work of the Shops Act Inspectors for the year ending 31st December, 1958, is summarised as follows :—

GENERAL INSPECTIONS

Visits	13,046
Re-visits	2,307
	<hr/>
	15,353
	<hr/>

SPECIAL VISITS

Half-day closing	8,401
Night closing	646
Sunday trading (day)	2,680
Sunday trading (night)	41
Appointments	635
Complaints and enquiries	170
Jewish traders	42
	<hr/>
	12,615
	<hr/>

STREETS PATROLLED

Half-day closing	7,279
Night closing	663
Sunday trading	2,577
	<hr/>
	10,519
	<hr/>

SHOPS ACT FORMS PROVIDED

Early closing day	425
Assistants' half-holiday	236
Young persons' hours of employment	207
Exemption (week-days)	170
Exemption (Sundays)	339
	<hr/>
	1,377
	<hr/>

STAFF ACCOMMODATION DEFECTS REMEDIED

W.C. and washing facilities	174
Heating, lighting and ventilation	35
Facilities for meals	32
	<hr/>
	241
	<hr/>

OFFENCES REPORTED FOR ACTION

Half-day closing :							
Sales after closing time	...	...	...	...	...	...	3
Night closing :							
Sales after closing time	...	...	...	...	...	...	12
Sunday trading :							
Illegal sales and failing to provide notices	...	...	...	...	...	...	125
Summonses issued	...	...	...	...	...	...	15
Warning letters issued in respect of above-mentioned offences							125

The 15 summonses in respect of illegal Sunday trading resulted from shopkeepers continuing trade in non-exempted goods on Sundays, and all the summonses were issued following the service of official warning letters for previous similar offences. In each case the charge was proved and a fine was imposed by the Magistrates.

Disinfestation and Disinfection

The Disinfecting and Cleansing Station is operated under the supervision of a Depot Superintendent, who reports daily to the Chief Public Health Inspector. The station is situated in Bacchus Road and thereby occupies a fairly central position in Birmingham.

The public health inspectors promptly investigate all complaints of infestation received by the Department from occupiers of domestic and business premises. Such complaints refer to infestations by bugs, fleas, flies, cockroaches, blackbeetles, crickets, ants, etc., and after investigation, the necessary arrangements for treatment are made with the Depot Superintendent.

1,308 houses received such treatment during the year, as compared with 908 in 1957, representing an increase of 400 treatments or 44% over the year. This large increase is probably due to the short spells of really warm weather experienced in May and September, when no less than 229 and 280 houses were treated respectively.

In addition to this work, many treatments have been carried out in business premises, including hospitals, licensed houses and restaurants, cinemas and public baths. Steam flies and cockroaches proved to be the main source of infestations occurring in food preparation rooms and kitchens.

No charges were rendered in respect of treatments for domestic premises, but in all other cases appropriate accounts were rendered by the Department, the charges being based solely on the cost of labour and materials used. The number of separate treatments involved amounted to 142 for the year, showing a small increase on the figure of 126 for 1957.

SERVICES TO THE TUBERCULOUS

The delivery and collection of complete bedding units for tuberculous patients is undertaken by the depot staff. The necessary arrangements for this work are made with the Chest Clinic, and deliveries for the year amounted to 196 units. Collections of units from houses for disinfection prior to re-issue amounted to 155.

Disinfection was also carried out in 307 houses following the removal of tuberculous patients to sanatoria or into new housing accommodation.

DISINFECTION

The Department, throughout the year, continued to assist certain aged people in essential cleansing of their homes, including the removal of rubbish. This resulted in the cleansing of 24 houses and the removal of 54 beds and bedding for destruction.

The steam disinfectors were kept working daily during the year in the disinfection of hospital bedding and blankets. This included similar work for the Birmingham Workshops for the Blind and for the Blood Transfusion Service.

Charges were rendered to appropriate authorities, where applicable, on the basis of 15/- per "stove," which represents one complete operation of a steam disinfectant. The total amount of material put through the steam disinfectors resulted in 1,569 complete stoves in the year.

CLINIC TREATMENTS

Bathing facilities for the cleansing of scabies cases and verminous persons are available centrally at the Cleansing Station. The clinic provides a day and evening service, remaining open until 8 p.m. during the week, except Saturday, when it closes at 5 p.m. No treatments are provided on Sunday and details of those carried out for the year are as follows :—

<i>Bacchus Road (men)</i>				<i>Scabies</i>	<i>Body Lice</i>	<i>Pubic Lice</i>
Men	...	...		271	141	31
<i>Bacchus Road (women)</i>				<i>Scabies</i>	<i>Body Lice</i>	<i>Pubic Lice</i>
Women	...	...	150	6	11	28
Girls	...	...	149	2	—	29
Boys	...	...	112	—	—	—
Second treatments			52	—	—	—
TOTAL				463	8	11
				57		

Children referred to in the above figures were treated at the same time as their mothers.

The facilities provided for the bathing of the aged and infirm were once again put to good use. These aged folk were collected and returned to their homes in Corporation transport under the care of a health visitor. During the year 597 baths were provided for women, and 359 for men. In 1957 there were 569 women and 162 men.

DRAINAGE AND SEWERAGE

The information which follows on the sewerage works carried out by the Public Works Department during 1958 has been kindly provided by the City Engineer and Surveyor, Sir Herbert Manzoni.

Inner Areas

The sewerage of the Nechells Green, Newtown and Ladywood Redevelopment Areas is in progress, and Units 27, 101 and 209 have been completed.

Bell Street, Phillips Street, Worcester Street and Dudley Street have been re-sewered in connection with the Inner Ring Road Scheme. In addition it has been necessary to replace or reconstruct lengths of the existing sewers in Blythe Street, Lionel Street, Snow Hill and Union Passage.

Outer Areas

Extensions or reconstructions of the existing sewers in Rednal Road, Emscote Road, Lapley Grove, Lodge Road at Hockley, and Hamstead Road have been completed and work is in progress in the Stratford Road, University building site and Hawthorn Brook at Erdington.

A further 800 yards of the Bourne Brook have been widened and deepened between Pershore Road and Bristol Road and the boundary brook on the Solihull Lodge Estate has been culverted.

During the year sewers have been constructed for the following Corporation Housing Estates:—

Acocks Green House Estate ; The Firs Estate, Castle Bromwich ; Worlds End Lane, Quinton; Lyndhurst Estate Parts 1 and 2; Kingshurst Hall Estate (outside City Boundary).

The above works have involved the construction of 3·08 miles of foul and surface water sewers and, in addition, approximately 1·91 miles of sewers have been laid by private enterprise in private housing estates.

Up to the end of December last, the total length of sewers now laid in the City was 1,631·60 miles, of which 1070·84 are foul water sewers and 560·76 miles are surface water sewers, a net increase of 3·33 miles after allowing for the abandonment of old sewers.

REFUSE COLLECTION AND DISPOSAL

Through the kind co-operation of the General Manager of the Salvage Department, the following information sets out the work of that Department during 1958.

The Salvage Department is responsible for the collection, utilisation and disposal of house refuse and certain trade refuse and the emptying of cesspools and privy pans. The Department also undertakes the collection and treatment of condemned meat, offal, vegetables and other wastes from the City Abattoir and Markets.

Dustbins

Dustbins, for the temporary storage of domestic refuse, are supplied by the Department in accordance with the policy adopted by the City Council in 1950 whereby these receptacles are provided as a charge on the General Rate Fund. During the past year 26,483 bins have been supplied, bringing the total number installed since the inception of the scheme to 296,511.

Refuse Collection

The total quantity of refuse of all kinds dealt with by the Department during 1958 was approximately 376,000 tons which represented an average of over 1,400 tons for each working day and necessitated the Department making some $16\frac{1}{2}$ million calls at premises throughout the City.

To carry out its duties in collecting and disposing of this amount of refuse the Department employed a fleet of 261 vehicles of all kinds including 86 electrically propelled vehicles.

The extensive re-development within the City has made varying demands on the Department and considerable re-organisation of many of the collection rounds has been necessary to maintain a good collection service. Such, however, is the flexibility of the "continuous" system of collection employed by the Department that this has been done without causing inconvenience to the occupiers of the premises concerned.

At multi-storey flats and other suitable establishments, the use of large containers of $1\frac{1}{4}$ cubic yards capacity has continued to prove most satisfactory and the total number now in use is 364 serving 4,467 premises. When full, the container is removed by a wheeled trolley to a vehicle which is equipped with a mechanical means of lifting and emptying the container. Practically dustless loading conditions are obtained with this method as the head of the container, when in the emptying position, is inside a rubber seal around the aperture in the vehicle.

The present system of normal refuse collection, that is, emptying the bin into a skep and then carrying the skep to the collection vehicle, has

been used by the Department for many years. It has the economical advantage that generally it only involves one journey by the collector to and from each house; on the other hand, unless care is taken, refuse may be spilled while the bin is being emptied into the skep and also while the skep is being carried to the vehicle and when being emptied into the vehicle. In addition the refuse in the vehicle is open to view during the time loading is taking place.

To improve the service given by the Department approval was given by the City Council to a 'pilot' scheme for a new system of refuse collection based on a method used extensively on the Continent. It involves the provision of a new type of dustbin having special fittings and a hinged lid, and a collection vehicle which incorporates, at the rear of the totally enclosed body, a mechanical device for emptying the bins. The collectors are supplied with trolleys for wheeling the bins to and from the vehicle, thereby eliminating the manual effort of lifting bins and skeps full of refuse. The lid of the bin does not open until the bin is in the tipping position against the aperture at the rear of the vehicle, thus producing virtually dustless loading conditions.

The area selected for the operation of the 'pilot' scheme covers about 11,000 premises and the general reactions of the householders have been very favourable. The fact that they are completely relieved of the inconvenience and annoyance previously caused to them by the operation of the skep system is greatly appreciated.

Additionally, the task of the refuse collectors in this trial area has been made clean and attractive and the risk of accident from heavy lifting and carrying has been eliminated.

A report on the operation of the new system will be submitted to the City Council early in 1959 with the view to its progressive extension throughout the City.

Refuse Disposal

The main method of refuse disposal employed is that of separation and incineration. The plants at the Department's five refuse disposal and salvage works are, however, all working to full capacity and surplus refuse has to be dealt with by controlled tipping.

At Elmdon Airport, where a scheme involving a major extension of one of the runways was carried out, the Salvage Department undertook the construction of the "shoulders" of the runway by controlled tipping on the adjacent land. This work, occupying a period of 20 months, resulted in some 143,000 tons of house refuse, screened dust and clinker being deposited and has now been completed.

Several major contracts were completed during the year under review including the erection of a new chimney stack and grit catcher at Brookvale Road Works, Witton, and a new garage, offices and employees' dining room at the same works.

A new vehicle garage was also erected at Rotton Park Street Works and important additions to the plant there included mechanical refuse charging equipment and a greatly improved system for the mechanical handling and quenching of clinker.

The acute shortage of adequate tipping sites in Birmingham and district for the disposal of the surplus refuse which cannot be treated at the five refuse disposal and salvage works, has resulted in plans being formulated for the erection of a new works at Lifford Lane, Kings Norton. This will replace the existing works at Lifford which is now obsolete and will deal also with additional tonnage to an extent which should eliminate the tipping of crude house refuse in the south of the City. An application for loan sanction in principle has been made to the Minister of Housing and Local Government, the total cost of the scheme being estimated at £559,750.

Future extension plans envisage the erection of a further new refuse disposal and salvage works at Castle Bromwich in the north-east of the City.

Salvage and By-products

The recovery of those items of salvage which can be usefully returned to industry was maintained during the year, but there was a steady decline in the demand for some items and a consequent fall in the prices offered by consumers. Ferrous scrap suffered most in this respect and considerable difficulty was encountered in disposing of the Department's accumulations.

An important section of the Department's work is the collection and disposal of condemned and surrendered meat and offal together with refuse from the City Abattoir and Markets. From the treatment of this material in the Department's organic plant a total of 2,200 tons of animal feeding stuffs, fertilisers and fats was produced.

The income of the Department for the year from all sources amounted to £226,602, compared with £183,707 for 1957.

Cesspools and Pans

At the end of 1958 there were 119 cesspools serving 154 premises, being regularly emptied by the Department. Two cesspools were abolished during the year and 15 new cesspools added to the collection lists.

There are 129 sanitary pans in use in outlying parts of the City which are regularly emptied by the Department.

THE CITY'S WATER SUPPLY

Headworks

Work has continued with the long term project for increasing the output capacity of the filtration plant in the Elan Valley by converting each of a number of the existing slow sand filter beds into two rapid gravity type filters. Three further units were completed and brought into commission making a total of eight beds so dealt with. The conversion of three further beds is in hand and construction of a second sedimentation tank for treatment of the washwater was well advanced at the end of the year.

Aqueduct

Further progress has been made with the laying of the Fourth Main of 60 inch diameter concrete-lined steel pipes on the siphon sections of the Aqueduct. About $3\frac{1}{4}$ miles of main were laid and altogether approximately 31 miles (85%) of the total length of $36\frac{1}{2}$ miles of siphon sections have been laid.

Frankley

The second instalment of eight rapid gravity filters with a total capacity of 16 million gallons per day is in commission. Construction work on the third instalment of twelve filters with a capacity of 24 million gallons per day has continued.

The additional 60 inch diameter concrete-lined steel main for conveying raw water from the North Outlet Tower of Frankley Reservoir to the Frankley filters was completed and brought into use in September.

Area of Supply

In addition to normal extensions of small diameter mains to cater for development within the City, 0.39 mile of 24" concrete-lined steel main was laid from Frankley Pumping Station to Cutlers Rough for the general improvement of supply to the Warley Zone. This main was completed in May.

Local Works - Whitacre

The reconstruction of the Whitacre Works was completed except for some ancillary work on road construction and instrumentation.

The new works were taken into commission in October and since then the output from the plant has averaged 3.9 million gallons per day supplying 2.4 m.g.d. in bulk to Coventry and 1.5 m.g.d. in bulk to Nuneaton.

General

All water distributed was chlorinated, generally at a rate of 0.3 parts per million.

The water distributed in the City area was entirely the soft moorland water of the Elan supply except for one day in August and a period of two weeks in October when the local Short Heath well was brought into commission to assist in maintaining supplies in parts of the distribution

system whilst repairs were being carried out to one of the leading mains from Frankley to the City.

Seagulls, generally in relatively small numbers, made regular winter visitations to Bartley Reservoir until March. The small degree of contamination of the raw water associated with their visits was, as on previous occasions, effectively dealt with by filtration and chlorination.

Water supplies were satisfactory in quantity except in some small isolated areas where improvements were made by replacing old corroded service mains or laying short lengths of additional small mains.

The above information has been prepared for inclusion in this Report by the Chief Engineer of the Water Department, through the kind co-operation of Mr. A. E. Fordham, General Manager and Secretary.

ROUTINE SAMPLING OF CORPORATION WATER

The high rainfall in the summer and autumn caused rather more pollution of the raw water than in some previous years.

Bacteriological Examination

ELAN VALLEY SUPPLY

The raw water from the Elan Reservoirs continues to be treated by rapid filtration and chlorination before entering the Aqueduct. During the year this has continued to give generally good results. Minor contamination occurred from time to time, usually in association with periods of heavy rain. The Aqueduct water is sampled at two points. At Steventon fortnightly samples are taken and at Frankley weekly samples are taken at the point where the Aqueduct discharges its water into the works. At Steventon there were four contaminated samples which contained 5, 2, 2 and 5 B.Coli Type 1 per 100 mls. The associated total viable organisms were 6, 9, 1 and 5 per 1 ml. The weekly samples of the water, taken at the Aqueduct outlet in the Frankley Works, agreed closely in bacterial content with those taken at Steventon. Of the 51 samples taken seven were contaminated. The samples contained 38, 240, 38, 2, 2, 2 and 9 B. Coli Type 1 per 100 mls. and 4, 11, 6, 1, 2, 2 and 11 viable organisms per 1 ml. All but the first and last of these contaminated samples occurred in five consecutive weeks between 16th September and the 14th October 1958 when the rainfall was particularly heavy. Storage in Frankley and Bartley Reservoirs led on numerous occasions to B.Coli being detected in weekly samples. The maximum number found was 15 B.Coli Type 1 per 100 mls. In view of this 0.5 parts per million of chlorine was added to the water before filtration.

The water from the Frankley and Bartley Reservoirs is filtered by slow sand filters and rapid gravity filters working in parallel. As might be expected, whilst the slow sand filters produced water of a relatively high bacteriological quality, rapid filtration did not remove a significant proportion of bacteria present.

Weekly samples of water, after filtration and final chlorination, were of excellent quality, the highest bacterial content being only 9. On one occasion a sample which was accidentally contaminated showed 4 B.Coli Type 1. The sampling technique was rigorously examined following this, and certain changes made. No further trouble has arisen from this source. No other sample showed any contamination.

During the year the following samples were taken from the pure water covered storage reservoirs :—

Edgbaston 26., Erdington 13., Hagley Road 26., Highters Heath 12., Northfield (1) 12., Northfield (2) 12., Perry Barr 12., Warley 12. From none of these specimens was B.Coli Type 1 isolated.

A further 66 samples were taken from domestic taps throughout the City, including those from which complaints had been received. These are taken to ensure that the bacteriological quality of the water is maintained throughout the distribution system. All these samples gave admirable results.

WHITACRE SUPPLY

Sewage pollution of the Rivers Bourne and Blythe continues to be a serious problem. In the River Bourne, of the 52 samples taken, 22 contained 24,000 or more B.Coli Type 1 per 100 mls. The pollution of the River Blythe was less heavy but 15 of the 52 samples showed a similar degree of contamination.

Storage of water from the River Bourne in Shustoke Reservoir considerably reduced the pollution. The most unfavourable results were 240 or more B.Coli Type 1 per 100 mls. which were found on eight occasions. Only 18 samples were taken from the Whitacre Reservoir during the year since no water from it was passed into the works from March to November. All these samples gave very low counts.

Slow sand filtration only was used at these works until October 1958. This virtually eliminated all traces of faecal pollution. From October the water passed into circulation was treated entirely by rapid filtration and chlorination in the reconstructed works. Before the water passes through the rapid gravity filters one to one and a half parts per million of chlorine are added. After filtration more chlorine is added in a concentration varying from 1 to 1.8 parts per million according to the residual chlorine content of the water entering the contact tank in which the water is stored for two hours before being pumped to Coventry and Nuneaton. The chlorine dosage is automatically determined by the residual chlorine content of the water at entry to the tank.

The results in the filtered and chlorinated water passed into circulation were admirable. No faecal organisms were detected in any sample. Towards the end of the year a slight but progressive rise was taking place in the total viable count. This was due to an aerobic spore-bearing organism of non-faecal origin, and was not thought to be of any great significance. The highest count of viable organisms was 88 per 1 ml.

Check samples taken at Monwode Lea and the Dairy Farm, Packington, some miles from the works, showed no deterioration in quality.

WELLS

Short Heath Well gave water which was generally of a high bacteriological standard. In July and August, after a period of heavy rain, subsoil water was again observed to be percolating through the brickwork. After repairs were undertaken, results were consistently good.

The results for the Longbridge Well continued to be good. Slight contamination of the water with coliform organisms was found on eleven occasions. After chlorination the water gave admirable results.

Chemical Examination

The number of samples taken throughout the year, their main composition and the range of their variations are set out on page 274.

The Welsh water varies little in chemical composition from year to year. If anything, the raw water contained slightly less total solids than in 1957. The free and albuminoid ammonia content and oxygen uptake were also lower.

The polluted waters of the Rivers Bourne and Blythe supplying the Whitacre Works vary considerably during the year. As in the Welsh water, the average results of chemical analysis were slightly lower than in the previous year.

Estimations of "Plumbo-solvency", by measuring the lead content of water which has passed rapidly through a column of bright lead shot, have been discontinued.

"Erosion" is still being estimated by determining the lead content of 10 mls. of water which have stood in the laboratory overnight with a one inch strip of bright lead immersed in it. As measured in the arbitrary units in use, there was virtually no change between 1957 and 1958 in the erosion produced by samples taken monthly of the filtered and chlorinated water leaving Frankley Works and similar samples from each of the three levels of supply gave closely similar results.

Once a month water, after over-night storage in a coiled lead pipe attached to the main carrying purified water from the Works into supply, has its lead content determined. The average content in the twelve samples was 1.0 parts per million, with a range between 0.4 and 1.3 among individual readings. This method simulates the conditions occurring in the houses of consumers.

Small quantities of detergent were detected in the raw water entering the Whitacre Works. After treatment, the water passing into supply has consistently been free from these substances.

Radiological Examination

Radiological examination of samples of raw and treated waters was commenced during 1958. The preliminary results obtained indicate that contamination of the waters with radioactive substances is insignificant.

AVERAGE RESULTS OF CHEMICAL EXAMINATION

No. of samples taken	Description	Ph.	PARTS PER MILLION (Extreme values in brackets)										ARBITRARY UNITS	
			Total Solid Matter	Free Ammonia	Albuminoid or Organic Ammonia	Nitrogen in Nitrates	Oxygen consumed in 4 hours at 27°C. (80°F)	Chlorine in Chlorides	Hardness (as CaCO ₃)	Total Alkalinity (as CaCO ₃)	Erosion (over-night in lead pipe coil)	Erosion (over-night in lead test strip)		
12	WELSH WATER: Aqueduct Outlet ...	8.8 (8.4-9.2)	42 (39-46)	.001 (.000-)(.012)	.048 (.014-)(.066)	.04 (0-)(.1)	1.63 (1.00-)(2.52)	8.1 (7.0-)(9.0)	18.5 (16-)(22)	8.0 (6.0-)(10.0)	No Readings	No Readings		
12	After storage in Bartley or Frankley Reservoirs ...	7.2 (6.9-8.0)	42 (38-46)	.000 (.000-)(.004)	.047 (.018-)(.072)	.06 (0-)(.1)	1.38 (0.88-)(2.29)	8.5 (8.0-)(9.0)	20.1 (10-)(28)	8.3 (7.5-)(10.0)	"	"		
12	After filtration and chlorination	6.9 (6.8-7.2)	42 (37-45)	NIL	.039 (.018-)(.054)	.06 (0-)(0.13)	1.26 (0.77-)(2.17)	8.5 (8-)(10)	20.0 (18-)(23)	8.0 (7.0-)(10.0)	1.0 (0.4-)(1.3)	125 (70-)(150)		
12	WHITACRE: River Blythe ...	7.7 (7.3-8.6)	437 (313-494)	.165 (.000-)(.66)	0.426 (.240-)(1.04)	2.05 (0.38-)(3.57)	3.75 (2.35-)(8.9)	27 (16-)(32)	261.5 (160-)(304)	136 (90-)(168)	Detergent 0.11 (0-)(0.36)	Nitrogen in Nitrates .05 (0.02-)(0.12)		
12	River Bourne ...	7.6 (7.3-7.9)	505 (430-564)	.143 (.000-)(.38)	0.29 (.096-)(0.45)	3.08 (1.27-)(4.30)	2.09 (0.31-)(4.9)	40 (34-)(51)	326 (232-)(356)	0.025 (0-)(0.1)				
12	After storage in Shustoke Reservoir ...	8.4 (7.7-8.7)	444 (405-477)	.011 (.000-)(0.08)	0.41 (.30-)(0.64)	1.08 (0.20-)(2.31)	1.30 (0.82-)(1.63)	47 (42-)(50)	269 (224-)(296)	NIL				
12	After filtration and chlorination	7.5 (7.2-8.0)	281 (59-462)	NIL	0.10 (0.04-)(0.26)	0.71 (0.0-)(1.45)	0.63 (0.29-)(1.40)	32 (11-)(52)	175 (40-)(292)		Perm. Hardness 93 (28-132-)			
4	WELLS: Longbridge ...	6.6 (6.6-6.6)	286 (262-320)	NIL	.018 (.012-)(.024)	3.42 (1.98-)(6.42)	0.16 (0-)(0.52)	17 (16-)(19)	189 (180-)(200)	95 (86-)(101)	Temp Hardness 84 (80-)(108)	105 (84-)(120)		
4	Short Heath ...	7.1 (7.0-7.4)	480.5 (460-515)	.003 (.000-)(.012)	.018 (.008-)(.030)	9.4 (9.9-)(13.1)	0.125 (0-)(0.20)	31 (30-)(32)	280 (240-)(296)	98 (88-)(106)	95 (60-)(124)	185 (172-)(204)		

Private Wells

INDUSTRIAL

A total of 110 premises are known to use water from bore holes within the City made up as follows :—

Breweries and mineral water manufacturers using well water for all purposes	8
Hotels and blocks of flats using well water for all purposes ...	3
Hospital using well water	1
Industrial premises using well water for all purposes	16
Industrial premises using well water for industrial purposes only	82
	<hr/>
	110
	<hr/>

Seventy samples for bacteriological examination and 33 for chemical analysis were obtained from various premises in 1958 and the reports indicated that the water from these bore holes, although hard, was in a state of high bacteriological purity.

DOMESTIC

There has been a change in the number of dwellings in the City which have to rely on water from wells for their drinking supply.

The number of dwellings so supplied at the end of the years 1954 to 1958 were as follows :—

<i>Year</i>				<i>Number of dwellings</i>	<i>Source of Supply</i>	
					<i>Wells</i>	<i>Springs</i>
1954	.....	.....	.....	16	11	1
1955	.....	.....	.....	14	9	1
1956	.....	.....	.....	14	9	1
1957	.....	.....	.....	10	7	nil
1958	.....	.....	.....	9	7	nil

There is one temporary dwelling included in the total for 1958 drawing water from a well.

Dwellinghouses without Internal Piped Water Supplies

At the close of the year 899 houses in the City were known to be without a piped supply of water within the house. This figure compares with 947 at the end of 1957.

Two supplies were installed within houses following service of notice. One is known to have been installed by a landlord without service of notice and a further nine have been installed by owner-occupiers, making a total of 12 water supplies installed within houses during the year. There were 36 houses demolished or void pending demolition at the end of the year which lacked a water supply within the house.

849 houses continue to be occupied by persons who are not desirous of having a water supply within the house and, as each has available a piped supply of wholesome water within a reasonable distance of the house—often in a washhouse contiguous to the house, no action is taken

to require the provision of a piped supply within the house until either the tenant changes his mind about the desirability of such a supply or there is a change of tenancy.

1. Houses included in declared Clearance Areas	...	...	23
2. Houses where life did not justify expense	...	...	16
3. Houses supplied by wells—usually distant from nearest main supply (excluding one temporary dwelling)	...	...	8
4. Houses in which space limitation, or other reasons, made provision impracticable	...	...	1
5. Houses where occupants did not desire an internal supply	...	...	686
6. Houses where lack of drainage made provision impracticable	...	...	2
			<hr/> 736 <hr/>

These figures do not include houses situated in the Redevelopment Areas which are accounted for thus :—

Houses whose tenants have refused the provision of a supply	163
<hr/>	

SAMPLING OF SWIMMING BATH WATER

The practice was continued of sampling once a month without prior warning the water of every swimming bath in use. Estimation of free and total chlorine was made immediately and samples in which the chlorine had been neutralised with sodium thiosulphate were submitted for bacteriological examination within two hours of their being taken.

Free chlorine is the principal sterilising agent and, at each of various concentration levels, the following table shows the total number of samples there were and the numbers found bacteriologically unsatisfactory.

<i>Parts per million of free chlorine.</i>	<i>Total No. of samples.</i>	<i>Unsatisfactory samples No.</i>
2 or more	133	7
1.5—1.9	18	Nil
1.0—1.4	55	1
0.5—0.9	47	5
Nil—0.4	35	16

An arbitrary standard of not more than eleven organisms per 100 ml. and absence of coliform organisms is taken as the yardstick. There were 29 of the 288 samples which failed to reach this high standard, these being especially common among those samples containing the small amounts of chlorine.

Mr. J. Moth, General Manager of the Baths Department, states that the various swimming baths were very heavily used during the period under review, and the results of these bacteriological examinations are noted with satisfaction.

The Health Department maintains similar observations upon 3 privately owned and 8 school swimming pools from which a total of 58 samples were examined both chemically and bacteriologically.

INDUSTRIAL PREMISES

Sanitary Accommodation in Factories

Sanitary matters arising in factories are dealt with under the provisions of Part I of the Factories Act, 1937. The Act indicates the extent to which the provisions of this part are to be enforced by the local authority and includes general requirements relating to cleanliness, overcrowding, temperature, ventilation, drainage of floors and sanitary conveniences in factories in which mechanical power is not used.

The Chief Public Health Inspector and his staff are responsible for the above duties and the number of visits paid to industrial premises, defined as factories under the Act, totalled 5,284 for the year. Details of this work, including the number of premises registered, are as follows :—

<i>Factories</i>			<i>Number on Register</i>	<i>Inspections</i>	<i>Informal Notices</i>
With power	...	...	5,194	4,829	245
Without power		...	319	139	13
Other premises		...	403	316	3
TOTALS			5,916	5,284	261

The above figures reveal that very little change has occurred in the total number of premises registered, when compared with the figure for 1957, which was 5,942.

As in previous years, factory managements continued to co-operate with the Department in complying with the requirements of the informal notices referred to above. The Department, therefore, had no occasion to resort to statutory procedure with regard to such notices, except in one instance where an industrial management was fined £5 on two counts by the local Court of Summary Jurisdiction for failing to comply with the provisions of a notice requiring (a) an intervening ventilated space to the sanitary accommodation and (b) repairs to the men's urinal.

Public health inspectors, when making the above visits, continued the practice of attending to other statutory duties whilst on the premises. These duties refer to factory canteens, outworkers, etc., and in this way the most economical use of available man-power is exercised.

1.—INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(including inspections made by Public Health Inspectors).

<i>Premises</i>	<i>Number on Register</i>	<i>Number of</i>	
		<i>Inspections</i>	<i>Written notices</i>
(i) Factories in which Sections, 1, 2, 3, 4 and 6 are to be enforced by Local Authorities ...	319	139	13
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ...	5,194	4,829	245*
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	403	316	3
TOTALS ...	5,916	5,284	261*

2.—CASES IN WHICH DEFECTS WERE FOUND

<i>Particulars</i>	<i>Number of cases in which defects were found</i>			
	<i>Found</i>	<i>Remedied</i>	<i>Referred</i>	
			<i>To H.M Inspector</i>	<i>By H.M Inspector</i>
Want of cleanliness (S.1) ...	—	—	—	4
Overcrowding (S.2)	—	—	—	3
Unreasonable temperature (S.3)	—	—	—	2
Inadequate ventilation (S.4) ...	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—
Sanitary Conveniences (S.7)—				
(a) Insufficient	—	1	—	17
(b) Unsuitable or defective	719*	556	—	221
(c) Not separate for sexes ...	1	—	—	5
Other offences against the Act (not including offences relating to Outwork)	—	—	8	1
TOTAL ...	720*	557	8	253

*One was prosecuted.

Outworkers

Certain classes of light work in connection with various trades carried on in the City are given out to persons who do it in their own homes

or small workshops. Section 110 of the Factories Act, 1937, requires the employers of these people to supply the local authority with lists of their names and addresses during the months of February and August in each year.

The August return for 1958, which was submitted to the Ministry of Labour and National Service, gave the following particulars :—

LIST OF OUTWORKERS, 1958

<i>Nature of Work</i>							<i>Number of Outworkers in August</i>
Wearing apparel	...	...	...	...	...	...	200
Linen and household linen	...	...	...	...	...	...	8
Electro-plating	...	...	...	...	...	...	6
Brass and brass articles	...	...	...	...	...	...	374
Paper bags	...	...	...	...	...	...	27
Box making	...	...	...	...	...	...	74
Making of brushes	...	...	...	...	...	...	4
Buttons, hair pins, etc.	...	...	...	...	...	...	310
TOTAL	...	...	...	...	...	...	1,003

The above return reveals a slight decrease of 60 in the total number of outworkers employed, when compared with the figure of 1,063 for 1957. Whilst this decrease mainly refers to a reduction of outworkers employed in the trades dealing with wearing apparel, and box making, it is interesting to note that the figure of 374 in connection with brass and brass articles, shows a sharp rise of 147 when compared with the 227 outworkers engaged in this trade in 1957.

The total number of visits made by public health inspectors to outworkers' premises during the year amounted to 1,413.

Noise Abatement

Mechanisation, whilst leading to increased output, has in some cases also increased the industrial noise created in carrying out the operations. Complaints of industrial noise mainly arise from the occupiers of the houses situated in areas of mixed development, consisting of commercial, residential and industrial properties. During the year thirty-four complaints have been investigated; these related to noise created by the operation of machinery, such as automatic presses, air compressors, guillotines, grinding wheels, automatic lathes, refrigerators and polishing machines.

The main approach to the problems has been advisory, whereby, with the co-operation of the managements, such matters as the overhauling of the offending machinery, the fitting of silencers, introduction of sound insulation or the re-siting of the machines, has been carried out and the noise mitigated.

The provisions of the Birmingham Corporation Act, 1935, Section 58, relating to noise nuisances, have now been repealed by the Birmingham Corporation Act, 1958, Section 6; the new provisions are as follows :—

(1) Any excessive or unreasonable or unnecessary noise which is prejudicial to health or a nuisance shall be a statutory nuisance for the purposes of Part III of the Public Health Act, 1936.

Provided that :—

(a) in any proceedings brought by virtue of this section under the said Part III in respect of a noise occasioned in the course of any trade or business it shall be a defence for the defendant to prove that he has used the best practicable means for preventing or mitigating the noise having regard to the cost and to other relevant circumstances ;

(b) a justice shall not entertain a complaint under section 99 of the said Act with respect to a noise unless the complaint is made by not less than three occupiers of premises within hearing of the noise.

(2) Nothing in this section shall apply to a noise occasioned by the exercise by railway undertakers of statutory powers conferred in relation to their railway undertaking.

The above legislation came into force on the 1st August 1958 and, owing to the success achieved by the advisory methods during the year, there has been no need for the Health Committee to authorise legal proceedings under the above legislation.

Town and Country Planning Acts, 1947 and 1954

The continued liaison between this Department and the City Engineer and Surveyor has resulted in the maximum use being made of these Acts to ensure that good planning incorporates the legislated requirements of Public Health and the recommendations in codes of practice.

Plans and applications which have a bearing on the work of the Department, such as those for food premises, offensive trades and factories, are forwarded to the Chief Public Health Inspector and, after preliminary examination, are referred to specialist officers in the Department where necessary. During the year 1,317 planning applications (an increase of 56 from 1957), together with appropriate plans, were

referred to the Department and were scrutinised by the following officers :

	<i>Number of applications referred</i>						
Public Health Inspectors	1,173
Smoke Inspectors...	515
Housing Inspectors	131
Milk Inspectors	3
Shops Inspectors	116

The smoke inspectors are concerned with the classification of the proposed development under the Town and Country Planning (Use Classes) Order 1950, and the siting of machinery to prevent, as far as practicable, complaints arising in the future from noise, fume and dust emissions. Forty-eight industrial premises were visited at the request of the City Engineer and Surveyor to ascertain that the conditions of approval as granted by the Public Works Committee in regard to previous applications have been complied with.

Opinions of various officers were collated and suitable replies prepared by the Chief Public Health Inspector. In 575 cases (approximately 44 per cent.) it was found necessary to make comment which was, as far as possible, offered in constructive form.

Industrial and Commercial Survey—Redevelopment Areas

The classification under the Town and Country Planning (Use Classes) Order 1950 of seven industrial premises within the Redevelopment Areas has been completed to provide information in connection with the Industrial and Commercial Survey of premises for allocation of alternative sites for industrial use.

HEATING APPLIANCES

The Testing of Guards on Oil, Gas and Electric Heating Appliances

The Heating Appliances (Fireguards) Act, 1952, prohibits the sale or letting on hire of unguarded electric fires, gas fires or oil heaters. This legislation was followed by the Heating Appliances (Fireguards) Regulations, 1953, which applied to heating appliances of a type suitable for use in a dwellinghouse or other residential premises and the schedule to the Regulations prescribed the tests to be applied in ascertaining whether the guards, when fitted, complied with the Regulations.

The tests are designed to ensure, as far as practicable, that the guards are of robust construction, securely fixed, and that when the appliances are in use the possibility of ignition of clothing and other fabric by reason of direct contact with the heating element or flame, is considerably reduced.

The following table summarises the inspectorial work involved during the year :—

<i>No. of premises visited</i>	<i>No. of appliances examined</i>	<i>No. of appliances found unsatisfactory</i>
210	1,106	33

Of the thirty-three unsatisfactory appliances, eighteen were found to be without guards and the remainder (fifteen) had guards fitted which did not satisfy the tests carried out in accordance with the schedule of the Regulations. All were second hand. 7 electric and 11 gas fires had no guards, 12 electric and 3 gas fires had defective guards.

All the above appliances were withdrawn from sale for requisite guards to be fitted and no legal action was necessary.

ATMOSPHERIC POLLUTION CONTROL

The reduction of atmospheric pollution in the interests of health and for improvement and preservation of amenities which an unpolluted atmosphere brings, has for many years been a matter of concern. Therefore the Clean Air Act, 1956 (Appointed Day) Order, 1958, which brought into operation on the 1st day of June, 1958, the remaining provisions of the Act, was acknowledged as a further step in the national effort towards Clean Air. These provisions related to the prohibition of dark smoke from chimneys, measures for dealing with grit and dust from furnaces, abatement of smoke nuisances, and the application of the Act to railway engines, vessels, and Crown premises.

Clean Air Act, 1956

Section 1 of the Act prohibits the emission of dark smoke, i.e., smoke as dark as or darker than Shade 2 of the Ringelmann Chart, from any chimney of a building in excess of the time periods as prescribed in The Dark Smoke (Permitted Periods) Regulations, 1958. These Regulations recognise that at certain times the emission of dark smoke is unavoidable, for example during soot-blowing, or the cleaning and slicing of fires; therefore, the Regulations permit the following :—

- (1) Not more than 10 minutes of dark smoke in the aggregate from any chimney in any period of 8 hours, or 14 minutes in 8 hours if soot-blowing is carried out within that period.
- (2) The 10 and 14 minutes to be extended as follows in the case of chimneys serving more than one furnace :
A chimney serving 2 furnaces—18 and 25 minutes respectively.
A chimney serving 3 furnaces—24 and 34 minutes respectively.
A chimney serving 4 or more furnaces—29 and 41 minutes respectively :

In addition :

- (a) No continuous emission of dark smoke (other than that caused by soot-blowing) shall exceed 4 minutes, and
- (b) No emission of black smoke shall exceed 2 minutes in the aggregate in any period of 30 minutes. (Black smoke is smoke as dark as or darker than Shade 4 on the Ringelmann Chart).

It is interesting to note that for the purposes of (2) above where a single boiler or unit contains two or more furnaces, such as a marine boiler, which has three furnaces, or an industrial unit such as an intermittent brick kiln, which may have as many as eight furnaces, the furnaces count as only one unit and the longer exemption periods cannot be claimed.

Section 5 of the Act requires the occupier of any building in which a furnace is used to burn solid fuel, or solid waste, to use any practicable means there may be to minimise the emission of grit and dust from the

chimney which serves the furnace. The Section does not apply to furnaces designed for domestic purposes not being furnaces of boilers with a maximum heating capacity of fifty-five thousand or more British thermal units per hour.

The photographs Nos. 1 and 1A, taken in the Aston area show a typical example of the application to cupola furnaces of the practicable means that can be taken under this Section. Photograph No. 1 shows the usual method whereby the cupola gases passing through an expansion chamber are reduced in velocity and deflected by a baffle so causing a fall-out of the heavy particles of grit into the base of the collector, but the lighter particles escape. Photograph No. 1A shows an improved type of grit-arrester. In this type, whilst the larger particles of grit and dust are caught, washing arrangements in the form of a spray ensures a reduction in the emission of the smaller particles, so adding to the efficiency of the arrestation plant and minimising grit and dust deposits affecting the adjacent houses.

Section 6 also strengthens the law in regard to the arrestation of grit and dust by requiring that no new furnace shall be used to burn pulverised fuel, or to burn at a rate of one ton per hour or more solid fuel in any other form, or solid waste, unless the furnace is provided with plant for arresting grit and dust which has been approved by the local authority, or which has been installed in accordance with plans and specifications submitted to and approved by the local authority, and that the plant is properly maintained and used.

This Section is a form of prior approval by local authorities of new dust and grit arrestation plant. There is a right of appeal to the Minister of Housing and Local Government by any person who has applied to the local authority for an approval under this Section if he is dissatisfied with the decision of the authority on the application. It is fortunate that the smoke inspectors of the Department have the specialised engineering knowledge that is required to meet this new responsibility when considering plans and specifications for approval.

Section 16 provides for the abatement of smoke nuisances whereby smoke other than :—

- (a) smoke emitted from a chimney of a private dwelling, or
- (b) dark smoke emitted from a chimney of a building or from a chimney serving the furnace of a boiler or industrial plant shall, if it is a nuisance to the inhabitants of the neighbourhood, be deemed a statutory nuisance for the purpose of Part III of the Public Health Act, 1936.

In such cases there are no general criteria to be applied in relation to density, colour, or qualifying time periods, of the smoke emissions. Any control will depend on whether the volume and the location of the source of the smoke is such as to cause nuisance to the inhabitants of the neighbourhood.

Smoke Control Areas Nos. 1 and 2

The City of Birmingham Smoke Control (No. 1 and No. 2) Orders, 1958, became operative on the 1st November, 1958. The No. 1 Order refers to an area on the western boundary of the existing Central Smokeless Area, and No. 2 Order applies to an area at Erdington which includes the Lyndhurst Housing Estate.

Prior to the Orders coming into operation, it was considered necessary to organise a careful and continuous public relationship with the householders who would be affected and, concurrently with the creation of interest and understanding, it was desirable for guidance to be given on how to apply to the Council for grant towards the cost of approved adaptations. A booklet "Smoke Control Areas and the Householder" was compiled and issued by the Department giving detailed information on the adaptation and conversion of fireplaces, and the grants available; it also contained a map of the area and a personal note to the householder from the Chairman of the Health Committee. This booklet, coupled with the direct personal contact, was found to be most useful.

It is hardly necessary to point out the additional man hours entailed by the inspectorate in carrying out this work. Visits, re-visits, discussions at evening time with the wife and husband by their own fireside, the removal of any resentment and resistance, and the ironing out of the predominant questions such as "Why does the Council pick on us", "Who pays for this lot", and "What good is it anyway", are all matters which take up considerable time but play a valuable part in the presentation to the public of the Health Committee's policy upon the creation of smoke control areas.

In November, two smoke control area advisors were appointed and, after suitable training under the guidance of the experienced smoke inspectors, it is intended that the detailed survey work, the estimating of costs, the advisory service to the householders and the certification of the works carried out to the satisfaction of the Council, will enable the experienced inspectors to devote more time to the industrial and commercial aspects of the Smoke Control Areas.

The occupiers of the private dwellings have responded quite well to the use of solid smokeless fuel and in some instances, where it was desired to replace the old fashioned coal fired washboilers by either gas or electric washboilers, the tenants expressed their appreciation when the work was completed.

Photograph No. 2 shows a picture of one of the domestic old fashioned coal-burning ranges which was, as shown in Photograph No. 3, replaced by a continuous burning fire and tiled surround. Photograph No. 4 shows an old type range which was replaced by an approved combination grate, Photograph No. 5. The register type of firegrate of the Victorian Era, as shown in Photograph No. 6, was replaced by the approved appliance as shown in Photograph No. 7. Photograph No. 8 of an old fashioned

washboiler was replaced by the gas fired washboiler as shown in Photograph No. 9.

It is apparent that considerable improvement has been achieved in the private dwellings in which such adaptations have been made, not only in the efficient use of fuel combined with smokeless operation, but also in convenience and saving of time in the daily chores of the housewife.

Smoke Control Area No. 3

The procedure for establishing smoke control areas under the Clean Air Act, 1956, may be summarised as follows :—

1. Decision in principle on the location, size of the area, and type of property to be included, and notification to the Minister of Housing and Local Government of the provisional plan.
2. After receipt of the Minister's comments on the provisional plan, a detailed survey of the proposed smoke control area.
3. The making of the Order, the carrying out of the statutory procedure and submission of Orders for confirmation by the Minister.
4. After confirmation, action to bring the Order into operation, payment of local authority grants and claiming of Exchequer contributions.

In accordance with this procedure the Health Committee approved in principle the creation of a further area in the City to be known as Smoke Control Area No. 3. The outline map shows the area concerned, bounded by Great Charles Street, Livery Street, Cox Street, St. Paul's Square, Brook Street, George Street, Summer Row (to Great Charles Street), being an extension of the existing Central Smokeless Area created under the Birmingham Corporation Act, 1954.

The area contains approximately 55·8 acres of mixed development, the class and numbers of buildings being as follows :—

<i>Class of building</i>								<i>Number</i>
Private dwellings ...	...	...	...	...	...	...	...	45
Industrial buildings ...	...	...	...	...	...	...	...	44
Commercial buildings ...	...	...	...	...	...	...	...	103
Local Authority buildings ...	...	...	...	...	...	...	...	8
Churches ...	...	...	...	...	...	...	...	1
Government buildings ...	...	...	...	...	...	...	...	5
Hospitals ...	...	...	...	...	...	...	...	1
Other buildings ...	...	...	...	...	...	...	...	4

The cost of adaptations to the appliances which would qualify for grant in the 45 private dwellings is estimated to be approximately £1,100.

From the interviews with the occupiers of all premises, it is estimated that the annual amount of bituminous coal consumed in the area for all purposes is approximately 3,968½ tons. Of this total 3,788 tons are

consumed by mechanical means or hand firing in the industrial type furnaces. The balance of 180½ tons is used annually in stoves or in domestic type of fireplaces located as follows :—

Industrial premises ...	...	...	...	...	...	...	17 tons
Commercial premises	...	...	...	...	...	...	30½ tons
Private dwellings ...	...	...	...	...	...	...	123 tons
Other premises	...	...	...	...	...	...	10 tons

The additional supplies of the various smokeless fuels that may be required to replace the 180½ tons of bituminus coal are as follows :—

SOLID SMOKELESS FUEL WITH GAS IGNITION

It is estimated that 144½ tons of solid smokeless fuels will be needed ; the basis of calculation being a comparison of the theoretical thermal heating value of the fuels. With the provision of gas ignition to the appliances burning the solid smokeless fuel it is estimated that an additional gas supply of 2,632 therms would be required. This allows for 12.5 cubic feet of gas per lighting up period.

GAS—SPACE AND WATER HEATING

Assuming 10 per cent. of the coal may be replaced by gas in gas fired appliances it is estimated that 4,852 therms of gas would be required the basis of calculation again being a comparison of the theoretical thermal heating values of the two fuels.

ELECTRICITY—SPACE AND WATER HEATING

On the assumption of another 10 per cent. of the coal being replaced by the use of electrical appliances, it is estimated that the electrical energy required will be 142,074 kilowatts on the basis that one kilowatt hour equals 3,415 British thermal units.

It is anticipated that the Order made under Section 11(3)(c) of the Clean Air Act, 1956, will exempt the industrial fireplaces specially designed or adapted for the burning of oil or bituminous coal, if the arrangement or mechanical means of combustion are efficient and are installed, maintained and operated so as to minimise the emission of smoke. This will have the effect of preventing undue smoke without increasing the demand for smokeless fuels in the area.

The earliest date on which the Order is likely to be brought into operation is the 2nd November, 1959.

Atmospheric Pollution by Smoke from Industrial Furnaces

Regular observations by the smoke inspectors were maintained throughout the year in all districts and, with the coming into operation of the provisions of the Dark Smoke (Permitted Periods) Regulations

on the 1st June, 1958, it was appreciated that effective administration of Sections 1 and 2 of the Clean Air Act, 1956, would require detailed information which could only be acquired by a systematic survey of the fuel burning equipment serving the industrial chimneys in the area. This form of survey was carried out as a routine measure with the result that opportunities were afforded the smoke inspectors to discuss with many managements of industrial premises the nature of the fuel burning plant, the operating conditions, and also an exchange of views on measures considered necessary to enable the plant to avoid contraventions of the Regulations. Advisory work of this nature is recommended as an essential step in any Clean Air policy. On the other hand, the requirements of legislation have also to be considered. Therefore, contraventions noted during district observations were reported to the appropriate committee for their consideration of legal proceedings being taken.

Observations throughout the year on chimneys were as follows :—

<i>No. of chimneys observed</i>	<i>Total minutes of smoke emitted</i>	<i>Average smoke emitted per observation</i>
3,730	3,531	0.946 minutes

During the above observations the number of chimneys noted emitting excessive smoke was as follows :—

<i>Number of chimneys emitting excessive smoke</i>	<i>Total minutes of excessive smoke</i>	<i>Average excessive smoke emissions per observation</i>
39	596½	15.3 minutes

The premises were visited and the responsible persons interviewed. Of these chimneys, 47 per cent. were serving hand-fired coal furnaces, 33 per cent. were serving coal-fired mechanically stoked furnaces, 10 per cent. served oil-fired furnaces, and 10 per cent. were burning waste materials.

These emissions from individual chimneys were reported to the Health Committee or the appropriate Health Proceedings Sub-Committee, and authorisation to serve notices, to lay information and take all necessary proceedings was given under appropriate legislation.

After the service of notice, further observations on the chimneys resulted as follows :—

<i>Number of chimneys observed</i>	<i>No. of observations</i>	<i>Total smoke noted</i>	<i>Average smoke per observation</i>
39	126	70 minutes	0.55 minutes

thus showing that considerable improvement was effected by statutory action, the average duration of the smoke emissions being reduced from 15.3 minutes to 0.55 minutes per observation.



NO. 1.—CUPOLAS : DRY TYPE OF GRIT ARRESTERS



NO. 1a.—CUPOLAS : IMPROVED TYPE SHOWING WASHING ARRANGEMENTS



NO. 2.—OLD TYPE COAL BURNING RANGE BEFORE CONVERSION



NO. 3.—CONVERSION OF OLD TYPE COAL BURNING RANGE BY A CONTINUOUS SOLID SMOKELESS FUEL BURNING FIRE WITH TILED SURROUND AND GAS IGNITION



NO. 8—OLD TYPE SET-POT WASH BOILER BEFORE CONVERSION



NO. 9—REPLACEMENT OF OLD TYPE SET-POT BY GAS WASH BOILER



NO. 4.—OLD TYPE COAL BURNING RANGE BEFORE CONVERSION



NO. 5.—CONVERSION OF OLD TYPE COAL BURNING RANGE
BY AN APPROVED COMBINATION GRATE



NO. 6—REGISTER TYPE GRATE BEFORE CONVERSION



NO. 7—CONVERSION OF REGISTER TYPE GRATE BY AN APPROVED APPLIANCE

SUMMARY OF STATUTORY ACTION

PUBLIC HEALTH ACT, 1936

No. of Abatement Notices served	...	...	...	25
No. of prosecutions	...	...	...	1
Nuisance Orders granted	...	...	...	1
Total amount of fines imposed	...	...	...	£2

CLEAN AIR ACT, 1956, SECTION 1

No. of Prosecutions	...	...	...	...	10
Total amount of fines imposed	...	...	...	...	£130

Temporary Exemption Certificates

Section 2(2) of the Clean Air Act, 1956, recognises that it may not always be possible to prevent the emission of dark smoke from chimneys until alterations to the existing furnaces or equipment have been carried out. In such cases, and on the receipt of an application for temporary exemption, the provisions of the Section enable a local authority, if they think fit in suitable cases, to issue a certificate of temporary exemption from the provisions of Section 1 of the Act which relates to Dark Smoke emissions. This certificate may be given for the period of a year from the date of issue or for such shorter periods as may be specified. Certificates which expire after one year can be renewed but no certificate will remain in force after the 4th July 1963.

This system of certification is new in national smoke abatement legislation and provides an opportunity, if used judiciously, of effecting excellent results towards the future control of dark smoke from existing chimneys serving boilers or industrial process furnaces.

Though the results are not immediate, it is obvious when discussing the grounds of the application with the applicants, the specialised knowledge of the smoke inspector is valuable in establishing co-operation whereby any undertaking that may be given in support of the application will be such that, within a reasonable period of time, the adaptations proposed will ensure that the likelihood of future contraventions is limited.

During the year, the Health Committee authorised the issue of Temporary Exemption Certificates to twenty industrial firms in relation to applications received from their managements for such matters as the introduction of mechanical stokers, the redesign and modification of process furnaces and conversion of coal fired furnaces to gas, electricity or oil firing and replacement of existing unsatisfactory solid fuel mechanical firing equipment. It is estimated that costs incurred by the applicants in carrying out the proposed adaptations are approximately £17,470, thus illustrating the value of the legislation when interpreted with balanced judgement and reasonable care.

Installation of New Furnaces

Section 3 of the Act requires that, with certain exceptions, all new furnaces shall be, as far as practicable, capable of being operated continuously without emitting smoke when burning fuel of a type for which the furnace was designed ; furthermore, the section also makes it obligatory for the person proposing to instal a new furnace to give notice of his intention to the local authority. It is not necessary to submit plans and specifications because this form of prior approval is optional. The purpose of notification is solely to enable the local authority to know when and where new furnaces are being installed.

From the information noted during the scrutiny of building plans and Town and Country Planning Applications, whereby the installation of new furnaces was indicated, the requirements of the Act were drawn to the attention of the owners or architects concerned, thus ensuring that the responsible persons would be fully aware of the provisions.

During the year the notification of the intention to instal 117 new furnaces was received and the following table indicates the fuel usage :—

Fuel	<i>Solid</i>					<i>Electricity</i>
	<i>Coal</i>	<i>Smokeless Fuel</i>	<i>Oil</i>	<i>Gas</i>		
No. of Furnaces :—	6	14	75	14		8

The trend towards the use of oil as compared with other fuels is clear. In the case of the coal fired furnaces, all were equipped with mechanical stoking arrangements.

Three applications have been received for the prior approval of new furnaces and from the plans and specification details submitted, the furnaces were considered to comply with the requirements and were, therefore, approved.

Height of New Chimneys

The requirements of Section 10 of the Act in relation to the plans deposited in accordance with building bye-laws, which show that it is proposed to construct a chimney for carrying smoke, grit, dust or gases from a building, are carried out through the liaison between the Health Department and the City Engineer and Surveyor's Department whereby any appropriate plans are circulated for comment in regard to the height of the proposed chimneys.

Consideration is then given to :—

- (a) the purpose of the chimney,
- (b) the position and description of adjacent dwellings,
- (c) the levels of the neighbouring ground.

This procedure entails the making of enquiries from the architects or owners concerned, visits to the site, and the subsequent collation of the information by the Chief Smoke Inspector. The comments, adverse or otherwise, are then submitted for the consideration of the Public Works Committee.

During the year forty-one plans have been referred to the Department for comment and in three cases it was considered desirable for the height of the chimneys to be increased.

Atmospheric Pollution from Railway Smoke

The Dark Smoke (Permitted Periods) Regulations, 1958, apply to the emission of smoke from railway locomotives generally and not only to those operated by the British Transport Commission, and the provisions in earlier Acts which proved so ineffective for the abatement of smoke from railway engines are repealed.

From the observations maintained on individual coal fired locomotives operating at engine sheds, goods sidings, and stations, the emissions of black smoke that have been noted have rarely contravened the new limits of two minutes in the aggregate over a period of thirty minutes. It is when a number of locomotives are standing under steam on departure roads from the locomotive depots that a greyish smoke pall often occurs. This smoke being emitted at a comparatively low level does not disperse with any great rapidity and can be a considerable nuisance to the local inhabitants but, assuming that no individual engine emits smoke of a greater density than 1.99 of the Ringelmann chart, no powers are available under the Clean Air Act, 1956, to deal with such a nuisance.

Several features in furnace design of locomotive boilers such as the deflector plate, brick arch, and the blower all contribute towards improving the combustion of coal in the furnace and, when an engine is standing under steam, the discriminating use of the blower will keep the smoke emission down to the permitted density.

Fumes and Effluvia

During the year, fifteen complaints have been received from the occupiers of houses adjacent to industrial premises engaged on work such as cellulose spraying, enamelling, non-ferrous metal melting, metal hardening and plating processes.

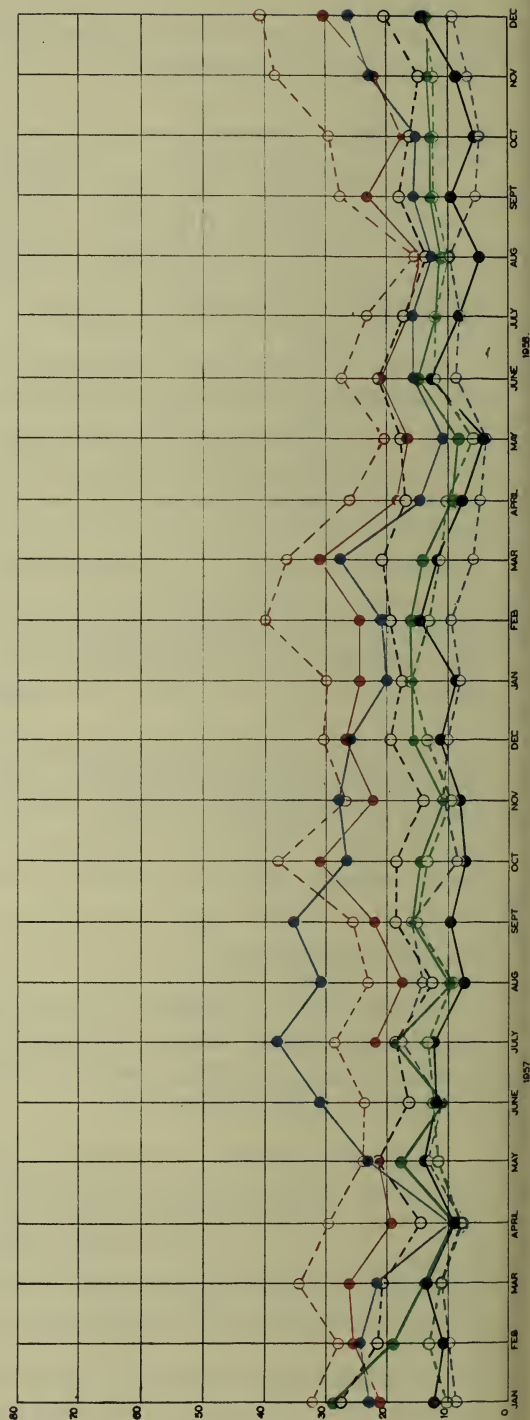
After investigation, and upon the source of the complaint being established, the owners or managers of the works concerned were interviewed and remedial measures discussed. Whilst each case has to be considered on its merits, one often finds that the successful measures undertaken towards the mitigation of one source of complaint can give a valuable lead towards the steps that should be taken in other instances.

It is pleasing to note that, by the co-operation of the owners and managements, the remedial measures proposed were adopted without the service of statutory notices.

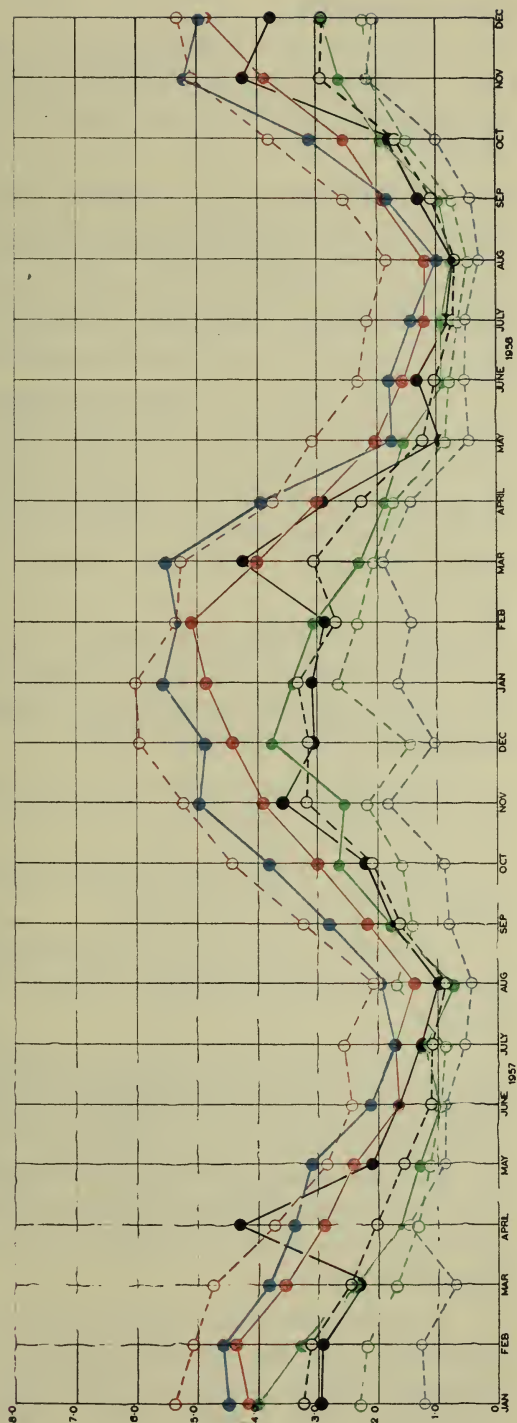
ATMOSPHERIC POLLUTION.

DEPOSIT GAUGE.

MONTHLY RECORD OF SOLID MATTER IN TONS PER SQUARE MILE.



LEAD PEROXIDE METHOD.

MILLIGRAMS OF SO_3 PER 100 SQUARE CENTIMETRES.DAILY AVERAGE.

Dust Emissions

During the year investigations have been carried out in response to complaints of dust from the operation of wood-working machinery, the spraying of paints, the use of powder for plastics, and the polishing of metals.

For complaints of this description the investigation includes the use of detector slides exposed in suitable places in order to obtain conclusive evidence of the deposit. This evidence is then produced on interviewing the owner or manager of the works emitting the deposits and usually, from the discussion which follows, remedial measures are undertaken in order to prevent a recurrence of the nuisance.

In three instances it was found necessary for the Health Committee to authorise the service of statutory notices under the Public Health Act, 1936, two being for the excessive emissions of wood shavings and dust, and the other for the emission of paint dust ; the requirements of the notices were complied with and no further legal action was necessary.

Pollution Recording Apparatus

The monthly recording of the eight stations has been maintained throughout the year. Each station consists of a deposit gauge and a lead peroxide instrument.

The plotted graphs show the fluctuations of the readings during the years 1957 and 1958.





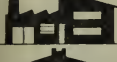

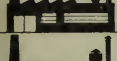
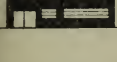
Graph No. 1 indicates the monthly deposits of the total solid matter expressed in tons per square mile.

Graph No. 2 shows the estimation of sulphur by the lead peroxide method expressed in milligrams of SO_3 per 100 square centimetres—daily average.

The pictorial chart indicates the type of area where the deposit gauges are sited and also an estimation of the annual total of the deposited solid matter recorded by the gauges during the years 1957 and 1958.

With the exception of the gauge situated in the St. John's, Deritend area, which showed a slight increase over the year of a total of 2.71 tons per square mile, all the recordings from the other stations show a decrease in varying degrees.

A comparison of the calculated daily average recordings of sulphur trioxide by the lead peroxide method over the years 1957 and 1958 indicates that the gauges at West Heath Hospital and Aston Cross Restaurant, show a slight increase, whilst the other gauges record a decrease.

ATMOSPHERIC POLLUTION.				
YEARLY TOTAL OF SOLID MATTER IN TONS PER SQUARE MILE.			1957	1958
	COMMERCIAL.	GT. CHARLES STREET.	312·01	216·29
	RESIDENTIAL.	WEST HEATH	132·93	81·50
	RESIDENTIAL.	EDGBASTON RESERVOIR.	126·93	111·49
	INDUSTRIAL & RESIDENTIAL.	"CARNEGIE"— HOCKLEY.	225·88	215·90
	INDUSTRIAL & RESIDENTIAL.	P.W. DEPARTMENT KINGSBURY ROAD.	183·87	147·36
	RESIDENTIAL.	TREAFOED LANE ALUM ROCK.	140·38	133·69
	INDUSTRIAL.	ASTON CROSS.	252·01	250·15
	INDUSTRIAL.	"ST. JOHN'S"— DERITEND.	342·48	345·19

The recordings of the eight stations are shown in the following table :—

					Daily Average Mgms per 100 sq. cms.			
Station					1957	1958	SO ³ down	SO ₃ up
Great Charles Street	...	...	...	...	3·54	3·47	0·07	—
West Heath Hospital	...	...	...	...	1·07	1·17	—	0·10
Edgbaston Reservoir	...	...	...	...	2·42	2·34	0·08	—
Carnegie Welfare Centre, Hockley	...	...	...	...	2·12	1·96	0·16	—
P.W. Dept., Kingsbury Road, Erdington	...	...	...	...	2·15	1·95	0·20	—
Welfare Centre, Treafoed Lane	...	...	...	...	1·53	1·52	0·01	—
Aston Cross Restaurant	...	...	...	...	2·97	3·02	—	0·05
St. John's Restaurant, Deritend	...	...	...	...	3·97	3·89	0·08	—

A comparison of the recordings as depicted in the chart and tables show an encouraging trend in the reduction of atmospheric pollution, but it should be borne in mind that variations in the results at individual sites occur to a considerable degree over the yearly period. Therefore, caution is necessary before arriving at any definite conclusion.

INDEX

A

Accident ambulances, 154
 Adoption clinic, 113
 Adoption—prior medical examination, 195
 Aged and chronic sick, 162
 Agriculture (Safety, Health and Welfare Provisions) Act, 1956 252
 Airport—health control, 80
 Air raid shelters—demolition, 250
 Ambulance service, 153
 Ambulant patients—clinics, 146
 Analytical Laboratory, 92
 Animal feeding meat, 224
 Antenatal care—statistics, 132
 Antenatal clinics, 112, 120, 132
 Appointment clinics, 121
 Area comparability factors, 61
 Area of City, 54
 Atmospheric pollution, 283
 Attendances—maternity and child welfare clinics, 132
 Attested herds scheme, 226
 Audiology clinic, 113, 124

B

Bacon factories, 220
 Bacteriological Laboratory, 100
 Bakehouses, 208
 Bakeries, 216
 Bathing attendants, 146
 Bathing facilities, 265
 Beechcroft mother and baby home, 115
 B.C.G. vaccination, 84
 Bed Bureau, 160
 Birmingham, general, 51
 Birmingham Council for Old People, 162
 Birmingham Council for Social Service, 162
 Births—incidence and rates, 55, 61, 62
 Blindness, 197
 Blood tests, expectant mothers, 112
 Boarded out children, 193
 Bronchiolitis, 66
 Bronchitis, 60
 Burials, 250

C

Canal boats, 255
 Canteens—factory, 208
 Canteens—mobile, 208
 Caravans, 251
 Care of deprived children, 192
 Care of mothers and young children, 110
 Care of the aged and chronic sick, 162, 265
 Care of the mental defective, 184
 Care of the unmarried mother, 114
 Care of the unmarried mother—statistics, 122
 Catering premises, 267
 Causes of death, 63
 Central redevelopment, 231, 250
 Cerebral palsy, 201
 Certificates of disrepair, 242
 Cesspools, 269
 Child minders, 111
 Children Act, 1948, 192
 Children's clinics, 119
 Children's Home Nursing Service, 147
 Child Welfare Centres, 112
 Child Welfare Clinics—statistics, 119, 132
 Chiropody—aged persons, 164
 Chiropody clinic, 113, 134
 Clean air Act, 1956, 283
 Clean air campaign, 174
 Clean food campaign, 175
 Cleansing station, 265
 Clearance areas, 233
 Climatology—Birmingham, 5
 Coloured people—health education, 173
 Common lodging houses, 251
 Community care, 183
 Comparability factors, 61
 Compulsory removal, 197
 Confectionery bakeries, 216
 Consultation clinic, 120
 Contacts—tuberculosis, 86, 103
 Convalescent care, 168
 Cowsheds, 225
 Cream, 213
 Cream-imitation, 216
 Cremation certificates, 204
 Crude rates, 62

D

Daily guardian scheme, 111
Dairies, 224
Day Nurseries, 110
Day Nurseries—statistics, 118
Deaf-blind, 200
Deaf children—audiology clinic, 113, 124
Deaths, 59,
Dental clinics for the tuberculous, 106
Dental health education, 126
Dental service, 124
Deprived children—medical care of, 192
Diabetics—B.C.G., 86
Diphtheria, 66
Diphtheria immunisation, 82
Disinfection after tuberculosis, 265
Disinfestation and disinfection, 264
Disrepair certificates, 242
District nursing service, 143
Domestic air raid shelters, demolition, 250
Domestic help service 177
Domiciliary care of the premature infant, 137
Domiciliary laundry service, 148
Domiciliary library service, 106
Domiciliary midwifery, 128, 132
Domiciliary nursing service for children, 147
Domiciliary occupational therapy, 105
Drainage and sewerage, 266
Dust, 294
Dustbins—provision of, 267
Dysentery, 67

E

Eating houses, 207
Egg, frozen and liquid, 217
Elmdon airport—health control, 80
Emergency maternity service, 129, 136 158
Encephalitis, 69
Enforcement section, 246
Environmental health services, 229
Epidemiology, 66

Epilepsy, 203
Exhumations, 250
Expectant mothers—blood tests, 112
Expectant mothers—mass radiography, 113
Expectant mothers—postnatal examination, 113
Expectant mothers—relaxation classes, 113

F

Factories Act, 1937, 277
Factories—sanitary accommodation, 277
Factory canteens, 208
Fairgrounds, 254
Fireguards, loan of, 148
Fireguards, inspection of, 281
First aid—staff, 204
Fish, poultry, fruit and vegetable supplies, 222
Fog, 52
Food and drugs, 206
Food Hygiene Regulations 1955, 206
Food poisoning, 69
Food preparation premises, 206
Food shops—retail, 222
Food—unfit, 223
Foot defect clinic, 113, 134
Frosts, 52
Frozen confections, 214
Fumes, 291

G

General epidemiology, 66
General practitioners—children's clinics, 120
Guard, that fire campaign, 174
Guardianship, 187

H

Hawkers—registration of, 222
Health Committee, Functions of Sub-Committees, 5
Health Committee members, 4
Health education, 169
Health education, coloured people, 173
Health education, clean air, 174
Health education, clean food, 175
Health education, exhibitions, 173
Health education, dental decay, 126
Health education, guard that fire campaign, 174
Health talks, 113
Health visiting, 141, 164
Health visitors' training course, 141

Health visitors—tuberculosis, 104
 Heating Appliances (Fireguards) Act, 1952, 281
 Home help service, 177
 Home help service—mobile reserve, 177
 Home nursing service, 143
 Home nursing service—statistics, 149
 Home population, 54
 Homeless families, 110
 Hospital car service, 161
 Hospital follow-up—health visitors, 164
 Hospital Saturday Fund, Convalescence, 169
 Houses let in lodgings, 242
 House to house inspection, 241
 Houses, unfit, 235
 Housing Act, 1957, 233
 Housing (Financial Provisions) Act, 1958, 243
 Housing, 229
 Housing—points scheme, 176
 Housing of the tuberculous, 104, 177
 Hygienists—dental, 126

I

Ice cream, 214
 Iced lollipops, 215
 Illegitimacy, 57, 114, 122
 Immunisation—diphtheria, 82
 Immunisation—poliomyelitis, 87
 Immunisation—whooping cough, 84
 Improvement grants, 243
 Incidence of blindness, 197
 Industrial and commercial survey, 281
 Industrial centres, 185, 189
 Industrial premises—smoke, 287
 Industrial premises—supervision of, 277
 Infant mortality, 55, 62,
 Infectious diseases, 66, 81
 Infectious diseases—follow-up visits, 241
 Influenza, 60, 72
 Internal water supplies within dwelling houses, 275
 International certificates, 80

L

Laboratory services, 92
 Laundry service, 148
 Legitimacy in relation to mortality among infants, 114
 Leukæmia, 61

Library service, 106
 Licence, mental deficiency, 187
 Licensed premises, 209
 Live birth rate, 55
 Loan of nursing equipment, 147
 Loan of fireguards, 148
 Lodging houses—common, 251
 Lollipops, iced, 215
 Lunacy and Mental Treatment Acts, 184
 Lunacy Section, 189

M

Malaria, 72
 Mass radiography—nursing staff, 146
 Maternal mortality, 59, 130
 Maternity and child welfare centres, 112
 Maternity service—emergency, 128, 136, 158
 Maternity services, 128
 Measles, 72
 Meat and other foods—inspection of, 220
 Medical care of deprived children, 192
 Medical examinations—staff, 204
 Medical Officer for Staff Welfare, 204
 Meningococcal infection, 73
 Mental deficiency Section, 189
 Mental defectives care of, 184
 Mental Health, 181
 Mental health workers—training, 190
 Meteorological observatory, 51
 Midland Spastic Association, 201
 Midwifery—domiciliary, 128
 Midwives, domiciliary, 128, 132
 Milk and dairies, 209
 Milk supply, 224
 Mobile canteens, 208
 Mortality among infants, 58
 Mortality rates, 59, 103,
 Mortality—tuberculosis, 103
 Mother and baby home, 115

N

National Assistance Acts, 197
 National Health Service Act :—
 Section 22—Care of mothers and young children, 110
 Section 23—Midwifery, 128
 Section 24—Health Visiting, 141
 Section 25—Home Nursing, 143

Section 26—Immunisation and vaccination, 82
 Section 27—Ambulance service, 153
 Section 28—Prevention of illness, care and after care, 162
 Section 29—Domestic help, 177
 Section 51—Mental health, 181
 Neonatal death rate, 55
 New houses, 237
 Night watchers' service, 177
 Noise abatement, 279
 Nuisances—abatement of, 244
 Nuisances—urgent, 249
 Nurseries and Child Minders' Regulation Act, 1948, 111
 Nurseries—day, 110
 Nurseries—priority classes, 110
 Nurseries—private, 111
 Nurseries—training, 111
 Nursery students, 111
 Nurses' agencies, 191
 Nurses—student—training in public health, 142, 145
 Nursing attendants, 146
 Nursing equipment—loan of, 147
 Nursing homes, 191
 Nursing staff—mass radiography, 146
O
 Observatory—Edgbaston, 51
 Obstructed drains, 249
 Occupation centres, 185, 189
 Occupational therapy, 104, 105
 Offensive trades, 252
 Ophthalmia neonatorum, 130, 200
 Oral hygienists, 126
 Outworkers, 278
 Overcrowding, 237
P
 Paratyphoid fever, 73
 Parent guidance clinic, 182, 188
 Pemphigus, 130
 Perinatal death rate, 57,
 Personal health services—Ten Year Survey, 14
 Pig keeping, 253
 Pleasure fairs, 254
 Pneumonia, 60, 74

Points scheme, 176
 Poliomyelitis, 74
 Poliomyelitis—Immunisation, 87
 Pollution recording apparatus, 294
 Population, 54
 Population, by wards, 64
 Postnatal clinics, 132
 Poultry supplies, 222
 Premature infants—domiciliary care of, 137
 Prematurity, 137
 Prevention of Damage by Pests Act, 1949, 256
 Prevention of illness, care and after-care, 162
 Priority groups, day nurseries, 110
 Priority rehousing, 176
 Privy pans and middens, 269
 Problem families, 173, 177, 181
 Provision of internal water supplies within dwellinghouses, 275
 Psychiatric social service, 181, 188
 Public Health Inspection, 239
 Public Health Laboratory Service, 100
 Public houses, 209
 Purperal pyrexia and puerperal sepsis, 130, 136

R

Radiological examination of water, 273
 Rag Flock and Other Filling Materials Act, 1951, 261
 Railway engines—smoke, 291
 Rainfall details, 52
 Recuperative convalescent care, 168
 Redevelopment areas, 231, 250
 Refuse collection and disposal, 267
 Rehousing applications, 105
 Relaxation classes—expectant mothers, 113, 134
 Remedial exercise clinics, 122
 Rent Restrictions Acts, 243
 Responsibility for antenatal care, 105
 Responsibility of Sub-Committee of Health Committee, 5
 Retail food shops, 222
 Rodent control, 256

S

Salvage and refuse collection, 267
 Sampling of Corporation water, 271
 Sampling of milk, 211
 Sampling of swimming bath water, 276
 Sanitary inspection, 239

Scabies, 77
 Scarlet fever, 77
 School children—B.C.G. vaccination, 84
 Sewerage, 266
 Sewing classes, 113
 Shellfish, 219
 Shops, supervision of, 262
 Short-term care, 188
 Slaughterhouses, 220
 Slum clearance, 229
 Smallpox, 78
 Smallpox vaccination, 91
 Smoke Control Areas, 285
 Smoke—industrial premises, 287
 Snow, 52, 53
 Spastics, 219
 St. John Ambulance Brigade, 161
 Staff, 7
 Statistics—Deprived children, 196
 Statistics—Home Help Service, 178
 Statistics—Home Nursing Service, 149
 Statistics—maternity and child welfare, 118
 Statistics, tuberculosis, 106
 Statistics—vital, 54, 65
 Statutory supervision, 186
 Stillbirths, 55, 62,
 Student nurses' training, 142, 145
 Suicides, 59
 Sunshine details, 53
 Supervision of industrial premises, 277
 Swimming bath water—sampling of 276
 Synthetic cream, 216

T

Temperature details, 52
 Ten Year Survey—Personal health services, 14
 Tents, vans and sheds, 251
 Thunder, 53
 Tips, 253
 Town and Country Planning Acts, 280, 290
 Training of health visitors, 141
 Training nurseries, 111
 Tuberculosis, 102
 Tuberculosis and the milk supply, 225
 Tuberculosis—B.C.G. vaccination, 84
 Tuberculosis—contacts, 86, 103
 Tuberculosis—domiciliary occupational therapy, 105

Tuberculosis—mortality, 103
 Tuberculosis in slaughtered cattle, 222
 Tuberculosis—statistics, 106
 Tuberculosis—visitors, 104
 Tuberculous—dental clinic, 106
 Tuberculous—domiciliary library service, 106
 Tuberculous—housing of, 104, 176
 Tuberculous—rehabilitation of, 105
 Typhoid, 78

U

Unmarried mothers—care of, 114
 Unfit houses—individual, 235
 Unmarried mothers—statistics, 122
 Urgent nuisances, 249

V

Vaccination, 82
 Vaccination, B.C.G., 84
 Vaccination certificates, 80
 Vaccination, Poliomyelitis, 87
 Vaccination, Smallpox, 91
 Venereal diseases, 79, 101
 Verminous premises, articles and persons, 264
 Veterinary and food inspection, 220
 Vincent, E. W.—Trust Fund, 164
 Visitors to Department, 174
 Vital statistics, 54 65,
 Voluntary workers, 113, 161

W

Ward, birth, death, etc., rates, 64
 Ward populations, 64
 Water—radiological examination, 273
 Water—sampling of, 271
 Water—sampling of swimming bath water, 276
 Water supply, 270
 Water supplies—provision of internal, 275
 Watercress, 218
 Weather details, 51
 Welfare Centres, 112
 Welfare Centres, voluntary workers, 113
 Welfare of the aged, 162, 197
 Wells, 275
 Whooping cough, 80
 Whooping cough immunisation, 84
 Winds, 53
 Women's Voluntary Service, 161